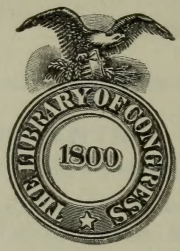
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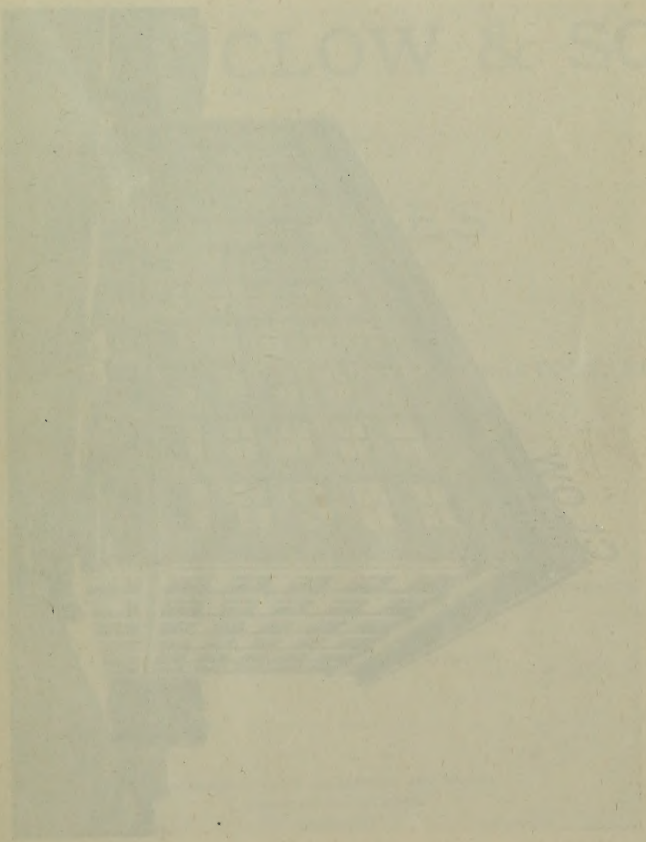
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THE CLOW BUILDING,
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ILLUSTRATED CATALOGUE

OF

JAMES B. CLOW & SONS

MANUFACTURERS OF

SUPPLIES

FOR

WATER AND GAS WORKS, RAILROADS, CONTRACTORS, PLUMBERS, STEAM AND GAS FITTERS.

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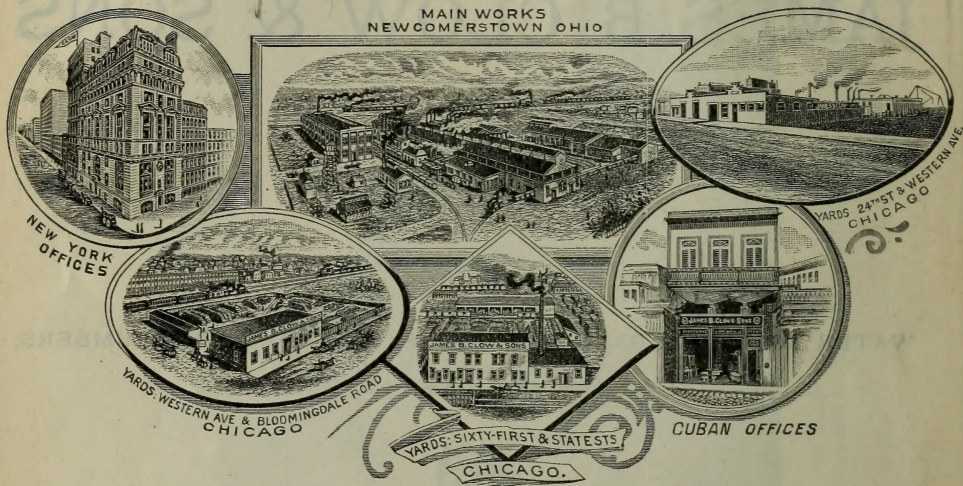
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The Lakeside Press
R. R. DONNELLEY & SONS COMPANY, PRINTERS
CHICAGO

SPECIAL NOTICE

Monthly settlements, unless otherwise agreed.

Bank remittances must be made with Chicago or New York exchange.

When ordering, give department letter as well as plate number, also details according to catalogue description, and thus save time and correspondence and avoid confusion.

Specifications for goods not standard should be explicit and complete and, when possible, accompanied by sketch.

Definite instructions as to route, packing, insurance, etc., should accompany each order; otherwise the route is optional with us.

Boxing charged at cost; Cartage at lowest rates; Goods not insured unless so ordered.

As questions constantly arise regarding the responsibility of shipper, carrier and consignee, for loss of and damage to goods, etc., in transit, and in order to obviate lengthy correspondence concerning the same, we beg to call special attention to the following:

> Our responsibility ceases as soon as goods are delivered in good order and condition at railroad depot or wharf in this city, and a receipt taken for them. If the carriers insist on our signing a release or other document having reference to their liability, before they receive the goods, of course we must comply; that will not, however, in any way affect the right of the party to whom they are consigned to recover damages for any carelessness or negligence on the part of the carrier.

We guarantee that the packing of every article is inspected by two persons and that all goods are carefully and well packed by experienced men. We will not, therefore, allow claims for breakage.

Pipe, Cast and Wrought, Brass Goods and all supplies are carefully tested and inspected, but as it is not always possible to detect imperfections, the only guarantee given is to replace such goods as prove defective. We are not responsible for damage beyond the price of goods. In case of defect the measure of damage is the price of the defective piece.

Special goods, made subject to inspection, must be inspected and accepted before shipment. After shipment is made our responsibility ceases.

Orders cannot be countermanded without our consent; this is especially true of goods other than standard.

Goods returned will not be accepted by us, unless arrangements for such return have been previously made by correspondence. Parties returning goods must be responsible for their delivery in good condition and, unless otherwise agreed, must pay shipping expenses.

Claims for corrections or deductions must be made within ten days after receipt of goods.

Discount sheets will be issued promptly upon change of market prices, but all quotations are subject to change without notice.

Contracts are subject to delays from strikes, accidents, or causes beyond our control.

Correspondence should be addressed to the firm and not to individuals, that it may receive our immediate attention.

Orders promptly and carefully executed. Please destroy previous editions of our catalogue.

Respectfully yours,

JAMES B. CLOW & SONS.

CAST-IRON PIPE CULVERTS

MORE PERMANENT THAN WOOD AND CHEAPER THAN MASONRY.



For use as Culverts, Cast-Iron Pipe has fully proven its superiority over any material heretofore used. Masonry is expensive and easily destroyed, while Cast-Iron is cheap and practically indestructible. It is preferable to wrought-iron or steel, as the latter materials quickly rust. In case of washouts, Cast-Iron Pipe is never damaged; hence the culverts can easily be repaired.

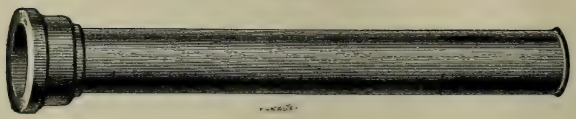
Cast-Iron Pipe is particularly advantageous in replacing old box culverts that have, by reason of decay or inferior foundation, become unfitted for use. The smaller sizes can be used to advantage at country cross-roads where, heretofore, wooden boxes have been placed. The Cast-Iron Pipe is permanent; the wooden box must be replaced every few years, and the cost is practically the same. The Cast-Iron Culvert can be built in less time than any other style. Ordinarily, a single culvert is used, but we have supplied 48-inch pipe for a culvert where five pipes were laid parallel to each other. The culvert was placed at a point where, during certain seasons of the year, washouts were likely to occur. The five 48-inch pipes now take care of the increased water flow and prevent further damage to the track. To this particular railroad we have sold, within the past four years, over fifteen thousand tons of culvert pipe which, their chief engineer reports, gives general satisfaction.

In many states it is used, practically to the exclusion of all other materials, in the construction of culverts on all public roads. Wherever used it will, under all circumstances, prove itself to be the only perfect material for constructing permanent culverts.

CAST-IRON CULVERT PIPE.—MADE IN 12-FOOT LENGTHS.

SIZE . . . . . INCHES	4	6	8	10	12	14	16	18	20	24	30	36	42	48	60	72
THICKNESS . . . . INCHES	$\frac{8}{8}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{13}{16}$	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{3}{8}$	$1\frac{5}{8}$
LIGHT, WEIGHT PER FOOT, LBS.	20	30	41	56	74	92	112	133	159	205	275	368	450	600	920	1265
THICKNESS . . . . INCHES	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{7}{8}$	$2\frac{1}{4}$
MEDIUM, WEIGHT PER FOOT, LBS.	22	34	47	64	82	105	133	160	190	260	360	488	625	830	1220	1834
THICKNESS . . . . INCHES	$\frac{17}{32}$	$\frac{17}{32}$	$\frac{9}{16}$	$\frac{11}{16}$	$\frac{11}{16}$	$\frac{13}{16}$	$\frac{7}{8}$	$\frac{15}{16}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{3}{8}$	$2\frac{13}{16}$
STANDARD, WEIGHT PER FOOT, LBS.	23	35	50	73	95	128	150	196	225	300	425	600	800	1000	1580	2217
THICKNESS . . . . INCHES	$\frac{9}{16}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{13}{16}$	$\frac{13}{16}$	$\frac{7}{8}$	1	1	$1\frac{1}{8}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	2	$2\frac{1}{2}$	$2\frac{7}{8}$
HEAVY, WEIGHT PER FOOT, LBS.	24	38	57	80	110	135	175	215	250	350	500	750	1000	1250	1675	2350

CAST-IRON PIPE.



A-300.

CAST-IRON WATER PIPE, MADE IN 12-FOOT LENGTHS.

TABLE OF WEIGHTS AND THICKNESSES USED UNDER DIFFERENT PRESSURES.

SIZE - - - - - - - - - - - - - INCHES	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48	60	72
THICKNESS, STANDARD - - - - - INCHES	1/2	1/2	1/2	1/2	9/16	9/16	3/4	3/4	7/8	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 7/8	2 1/4
WEIGHT PER FOOT FOR 100-LB. PRESSURE PER SQ. IN.	18	22	34	47	64	82	105	133	160	190	260	360	488	625	830	1220	1834
THICKNESS, MEDIUM - - - - - - INCHES	17/32	17/32	17/32	9/16	11/16	11/16	13/16	7/8	15/16	1	1 1/4	1 1/4	1 1/2	1 5/8	1 7/8	2 3/8	2 11/16
WEIGHT PER FOOT FOR 150-LB. PRESSURE PER SQ. IN.	19	24	38	55	73	95	120	150	180	225	300	425	600	800	1000	1500	2217
THICKNESS, HEAVY - - - - - - - INCHES	9/16	9/16	9/16	5/8	13/16	13/16	7/8	1	1	1 1/8	1 1/2	1 3/4	2	2	2	2 1/2	2 7/8
WEIGHT PER FOOT FOR 200-LB. PRESSURE PER SQ. IN.	20	26	40	60	80	110	138	175	205	250	350	500	750	1000	1250	1800	2350

Conditions under which Water Pipe is used vary and we can make Cast-Iron Pipe to meet any requirements. The extra cost between a standard weight and the weight given for the duty required, as shown in the tables, is very slight, and the question of weight to be used should have the careful consideration of any person ordering Cast-Iron Pipe.

All Water Pipe is coated with tar and tested to a hydrostatic pressure of 300 pounds per square inch.

CAST-IRON GAS PIPE.

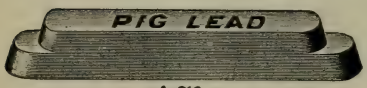
SIZE - - - - - - - - - - - - - INCHES	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48
THICKNESS - - - - - - - - - - INCHES	7/16	8/16	7/16	7/16	1/2	1/2	9/16	5/8	5/8	11/16	3/4	13/16	1	1 1/16	1 1/8
WEIGHT PER FOOT - - - - - - POUNDS	17	20	30	41	56	74	92	112	133	159	205	275	368	450	600

In ordering Gas Pipe always specify if Pipe is to be coated or uncoated.

Tested to a hydrostatic pressure of 200 pounds per square inch.

TABLE OF LEAD AND JUTE REQUIRED TO CALK THE JOINTS OF CAST-IRON PIPE.

SIZE - - - - - - - - - - INCHES	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48	60	72
LEAD, PER JOINT - - - - POUNDS	4 1/2	5 1/2	8	11 1/2	14 1/2	18	21 1/2	24	27	31	37	51	75	90	110	150	220
JUTE, PER JOINT - - - - OUNCES	8	9	12	15	17	24	26	29	32	32	37	50	60	80	120	135	155

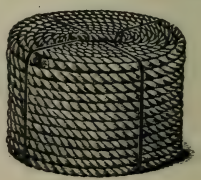


A-310.

Pigs weigh about 100 pounds. Market rates.

For prices see page 10.

For Pipe Laying Tools see pages 392 to 406.



A-312.

JUTE AND HEMP PACKINGS.

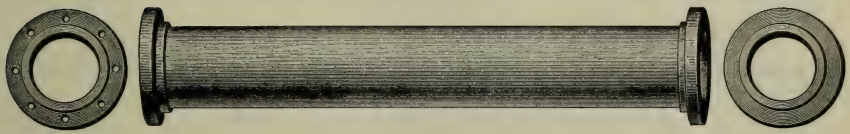
For prices see page 291.

CAST-IRON FLANGED PIPE.

SUITABLE FOR A WORKING WATER PRESSURE OF 100 POUNDS.

UNIVERSAL TEMPLATE.

ADOPTED BY AMERICAN SOCIETY OF MECHANICAL ENGINEERS AND THE MASTER STEAM AND HOT WATER FITTERS' ASSOCIATION.



A-325. FLANGED PIPE.

MADE IN 12-FOOT LENGTHS.

DIMENSIONS OF CAST-IRON FLANGED PIPE.

INSIDE DIAMETER OF PIPE - - INCHES	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48
THICKNESS OF PIPE - - - - - INCHES	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
WEIGHT OF PIPE, PER FOOT - - LBS.	18	24	35	50	70	90	115	140	160	200	275	375	495	600	800
OUTSIDE DIAMETER OF FLANGE, INCHES	$7\frac{1}{2}$	9	11	$13\frac{1}{2}$	16	19	21	$23\frac{1}{2}$	25	$27\frac{1}{2}$	32	$38\frac{3}{4}$	$45\frac{3}{4}$	$52\frac{3}{4}$	$59\frac{1}{2}$
WIDTH OF FLANGE FACE - - - INCHES	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	$4\frac{3}{8}$	$4\frac{1}{2}$	$5\frac{3}{8}$	$5\frac{3}{4}$
THICKNESS OF FLANGE - - - INCHES	$\frac{3}{4}$	$\frac{15}{16}$	1	$1\frac{1}{8}$	$1\frac{3}{16}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{7}{16}$	$1\frac{9}{16}$	$1\frac{11}{16}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{3}{4}$
DIAMETER OF BOLT CIRCLE - INCHES	6	$7\frac{1}{2}$	$9\frac{1}{2}$	$11\frac{3}{4}$	$14\frac{1}{4}$	17	$18\frac{3}{4}$	$21\frac{1}{4}$	$22\frac{3}{4}$	25	$29\frac{1}{2}$	36	$42\frac{3}{4}$	$49\frac{1}{2}$	56
NUMBER OF BOLTS IN FLANGE - - -	4	4	8	8	12	12	12	16	16	20	20	28	32	36	44
SIZE OF BOLTS - - - - - - - INCHES	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	1	1	$1\frac{1}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$
LENGTH OF BOLTS - - - - - INCHES	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{3}{4}$	$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{3}{4}$	5	$5\frac{1}{2}$	$6\frac{1}{4}$	$6\frac{1}{2}$	$7\frac{1}{4}$	$7\frac{3}{4}$
WEIGHT OF BOLTS, PER JOINT - LBS.	2	3	$6\frac{1}{2}$	$6\frac{1}{2}$	$15\frac{1}{2}$	16	$24\frac{1}{2}$	$34\frac{1}{2}$	45	58	77	132	$156\frac{1}{2}$	245	312

Shorter lengths than 12-foot made to order. Special weights for any pressure made to order. Steam Pipe should be heavier than above dimensions. Bolts and Gaskets furnished only to order. Drilling is $\frac{1}{8}$-inch larger than the Bolts. In ordering, specify if flanges are to be drilled. If other than standard drilling is wanted, send template. In laying out Flanged Pipe, use 12-foot lengths if possible. 4 to 24-inch Standard Pipe usually carried in stock in 12-foot lengths, faced $\frac{1}{16}$-inch short to allow for Gaskets.

Tongue and groove Flanges on Pipe and Specials to order. For details, see page 65.

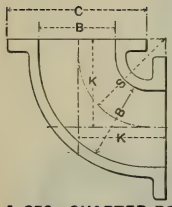


A-335. HEADER.

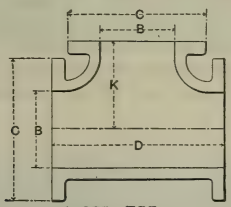
Steam Headers of any style or dimension, made to order.

SPECIALS FOR CAST IRON FLANGED PIPE.

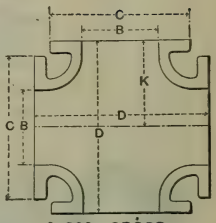
PROPORTIONED FOR WORKING WATER PRESSURE OF 100 POUNDS.



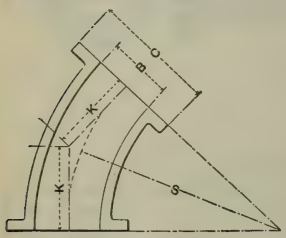
A-350. QUARTER BEND.



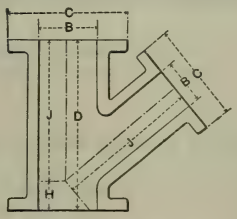
A-355. TEE.



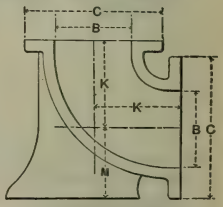
A-360. CROSS



A-365. EIGHTH BEND



A-370. Y BEND.



A-375. FOOT BEND.

TABLE OF DIMENSIONS AND WEIGHTS TO 24-INCH.

Special designs and sizes larger than 24-inch made to order. Details furnished on request.

B, PIPE SIZE — INCHES	3	4	6	8	10	12	14	16	18	20	24
C, OUTSIDE DIAM. OF FLANGE — INCHES	7½	9	11	13½	16	19	21	23½	25	27½	32
QUARTER BEND — K — INCHES	11⅛	11⅝	12¾	13⅞	16	17	18⅛	21¼	22⅜	23½	25⅝
QUARTER BEND — S — INCHES	10½	11	12½	13	15	16	17	20	21	22	24
QUARTER BEND — WEIGHT — POUNDS	45	60	95	150	230	320	415	585	705	885	1245
TEES — K — INCHES	5½	6	7½	8½	10½	11½	13	14½	15½	16½	19½
TEES — D — INCHES	11	12	15	17	21	23	26	29	31	33	39
TEES — WEIGHT — POUNDS	50	65	105	170	265	385	505	680	810	1010	1540
CROSSES — K — INCHES	5½	6	7½	8½	10½	11½	13	14½	15½	16½	19½
CROSSES — D — INCHES	11	12	15	17	21	23	26	29	31	33	39
CROSSES — WEIGHT — POUNDS	65	80	135	210	335	480	625	840	990	1225	1855
EIGHTH BENDS — K — INCHES	5⅝	6½	8½	9½	10	11	11½	12¾	13¾	14¾	16½
EIGHTH BENDS — S — INCHES	12	14	18	20	22	24	26	28	30	32	36
EIGHTH BENDS — WEIGHT — POUNDS	35	50	80	130	185	275	355	470	560	705	1040
Y BENDS — D — INCHES	14	15	18	21	25½	28½	32½	36½	39½	42½	49½
Y BENDS — H — INCHES	3	3	3½	4	4½	5	5½	6½	7	7½	8½
Y BENDS — J — INCHES	11	12	14½	17	21	23½	27	30	32½	35	41
Y BENDS — WEIGHT — POUNDS	60	80	136	240	375	545	745	1015	1250	1575	2405
FOOT BENDS OR BASE ELBOWS — K — INCHES	5½	6	7½	8½	10½	11½	13	14½	15½	16½	19½
FOOT BENDS OR BASE ELBOWS — M — INCHES	5	5½	6½	7½	9	10	12	13	14	15	17½
FOOT BENDS OR BASE ELBOWS — WEIGHT — POUNDS	55	65	100	160	250	360	480	640	765	945	1450

For detail of Flanges, see page 3.

Special weights and sizes made to order promptly. Regular sizes up to and including 16-inch usually in stock. All Flanges faced but not drilled. Drilled to order only. Flanged Pipe and Specials are largely used for both high and low pressure steam work as well as water, and our trade is fast increasing as customers learn the many advantages over Wrought Iron Pipe and Fittings. All weights are approximate.

*For Standard Steam Flanged Fittings, see pages 62 and 74.

SPECIALS FOR CAST-IRON PIPE.



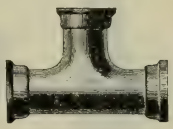
A-400. QUARTER BEND, 90°.



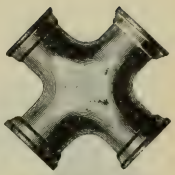
A-403. EIGHTH BEND, 45°.



A-406. SIXTEENTH BEND, 22½°.



A-409. TEE.



A-412. CROSS.

QUARTER, EIGHTH AND SIXTEENTH BENDS.—A-400, A-403, A-406.

MADE REGULARLY IN BELL AND SPIGOT ENDS.

SIZE . . . . . INCHES	3	4	6	8	10	12	14	16	18	20	24	30	36
A-400. QUARTER BENDS . . WEIGHT, LBS.	40	60	100	160	240	300	400	700	800	1000	1500	2500	3000
A-403. EIGHTH BENDS . . . WEIGHT, LBS.	45	55	85	145	190	300	430	485	820	1200	1450	2200	2800
A-406. SIXTEENTH BENDS . WEIGHT, LBS.	30	60	95	155	210	265	400	450	515	715	1300	2100	2400

TEES.—A-409.

MADE REGULARLY IN BELL ENDS. BELL AND SPIGOT TO ORDER.

SIZE . . . INCHES	3x3x3	3x3x4	4x4x4	4x4x3	6x6x6	6x6x4	6x6x3	8x8x8	8x8x6
WEIGHT . POUNDS	80	85	120	110	180	160	150	280	260
SIZE . . . INCHES	8x8x4	8x8x3	10x10x10	10x10x8	10x10x6	10x10x4	12x12x12	12x12x10	12x12x8
WEIGHT . POUNDS	240	220	350	345	295	275	450	385	380
SIZE . . . INCHES	12x12x6	12x12x4	14x14x14	14x14x12	14x14x10	14x14x8	14x14x6	16x16x16	16x16x14
WEIGHT . POUNDS	350	320	690	650	630	585	560	770	740
SIZE . . . INCHES	16x16x12	16x16x10	16x16x8	16x16x6	18x18x18	20x20x20	24x24x24	30x30x30	36x36x36
WEIGHT . POUNDS	750	740	736	700	1235	1390	2000	2880	4920

CROSSES.—A-412.

MADE REGULARLY IN BELL ENDS. BELL AND SPIGOT TO ORDER.

SIZE . . INCHES	3x3x3x3	4x4x4x4	6x6x6x6	6x6x6x4	6x6x3x3	8x8x8x8	8x8x6x6	8x8x4x4
WEIGHT . POUNDS	100	160	225	210	160	325	315	285
SIZE . . INCHES	10x10x10x10	10x10x8x8	10x10x6x6	10x10x4x4	12x12x12x12	12x12x10x10	12x12x8x8	12x12x6x6
WEIGHT . POUNDS	410	400	380	360	546	480	440	400
SIZE . . INCHES	12x12x4x4	14	16	18	20	24	30	36
WEIGHT . POUNDS	357	760	1020	1500	1600	2400	3000	6160

The above weights are given as standards simply for the purpose of estimating and are approximately correct.

We make all sizes and reductions in Specials, from 2 to 72-inch, and carry a large stock constantly on hand, both at our Foundries and in Chicago. All our Specials are made with full water-way and easy bends.

ALL KINDS OF SPECIAL CASTINGS MADE TO ORDER.

SPECIALS FOR CAST-IRON PIPE.



A-415. REDUCER.



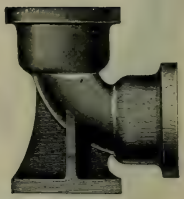
A-418. INCREASER.



A-421. OFFSET.



A-424. Y BRANCH.



A-427. BASE ELBOW.

REDUCERS.—A-415.

BELL END SMALL. SPIGOT END LARGE.

SIZE . . . . . INCHES	4x3	6x4	6x3	8x6	8x4	8x3	10x8	10x6	10x4	12x10	12x8
WEIGHT . . . . . POUNDS	40	100	80	135	115	112	194	180	158	240	230
SIZE . . . . . INCHES	12x6	12x4	14x12	14x10	14x8	16x14	16x12	16x10	18x16	18x14	18x12
WEIGHT . . . . . POUNDS	210	200	475	430	340	500	400	350	640	535	495
SIZE . . . . . INCHES	18x10	20x18	20x16	20x14	20x12	24x20	24x18	24x16	30x24	30x20	36x30
WEIGHT . . . . . POUNDS	458	980	690	615	540	885	800	750	2585	2010	2905

INCREASERS.—A-418.

BELL END LARGE. SPIGOT END SMALL.

SIZE . . . . . INCHES	3x4	4x6	4x8	4x10	6x8	6x10	6x12	8x10	8x12	10x12
WEIGHT . . . . . POUNDS	48	108	162	185	165	195	230	204	318	332

OFFSETS.—A-421.

BELL AND SPIGOT.

SIZE . . . . . INCHES	4x6	4x24	6x6	6x12	6x24	8x12	10x12	12x12
WEIGHT . . . . . POUNDS	80	106	135	160	207	220	285	380

Y BRANCHES.—A-424.

BELL ENDS. BELL AND SPIGOT TO ORDER.

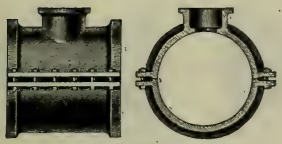
SIZE . . . . . INCHES	3x3x3	4x4x4	6x6x6	6x6x4	8x8x8	8x8x6	8x8x4	10x10x10	10x10x8	10x10x6
WEIGHT . . . . . POUNDS	90	155	235	218	312	302	295	500	380	345
SIZE . . . . . INCHES	12x12x12	12x12x10	12x12x8	12x12x6	14	16	18	20	24	30
WEIGHT . . . . . POUNDS	750	510	500	430	1135	1545	1500	1665	2765	4600

BASE ELBOWS.—A-427.

BELL ENDS. BELL AND SPIGOT TO ORDER.

SIZE . . . . . INCHES	3	4	6	8	10	12
WEIGHT . . . . . POUNDS	90	120	170	240	375	550

SPECIALS FOR CAST IRON PIPE.



A-430. SPLIT TEE.



A-433. SPLIT SLEEVE.

SPLIT TEES AND SLEEVES.—A-430 and A-433.

SIZE . . . . INCHES	3	4	6	8	10	12	14	16	18	20
SPLIT TEE . . EACH	5.00	6.25	8.25	10.75	12.50	15.00	18.75	21.25	25.00	30.00
SPLIT SLEEVE EACH	2.50	2.50	3.00	5.50	7.50	10.00	12.00	16.00	20.00	25.00

Split Tees made to order only, any size outlet required. They are used for leading Branches from the main without cutting out a section. Branches for any size, either Cast or Wrought Pipe.

Split Sleeves are an excellent special for repairing water mains without taking out broken pipe.



A-436. SLEEVE.



A-439. PLUG.

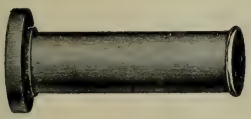


A-442. TAPER PLUG.



A-445. CAP.

SIZE . . . . . INCHES	3	4	6	8	10	12	14	16	18	20	24	30	36	48
SLEEVES, WEIGHT . . LBS.	40	50	80	110	146	190	212	240	360	557	710	1175	1222	1650
PLUGS, WEIGHT . . LBS.	10	10	20	30	45	65	70	95	125	150	185	370	470	----
TAPER PLUGS, WEIGHT. LBS.	--	10	18	30	44	53	---	---	---	---	---	----	----	----
CAPS, WEIGHT . . . LBS.	20	30	40	75	100	120	150	190	225	284	420	450	----	----



A-448.
STANDARD FLANGE AND SPIGOT.



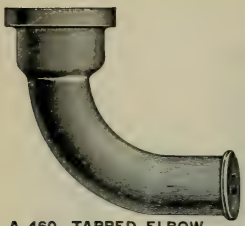
A-451.
STANDARD FLANGE AND BELL.

A-448 and A-451.

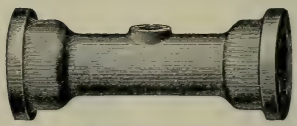
SIZE OF PIPE . . . . . INCHES	3	4	6	8	10	12	14	16	18	20	24
A-448. LAYING LENGTH . . . . . INCHES	16	16	16	16	18	18	18	20	20	20	24
A-448. PRICE . . . . . EACH	1.90	2.50	3.75	5.95	9.00	11.85	14.70	20.00	22.80	27.50	43.00
A-451. LAYING LENGTH . . . . . INCHES	4	4	4	4	6	6	6	6	6	6	6
A-451. PRICE . . . . . EACH	2.20	2.80	4.05	6.00	8.75	11.25	14.40	18.00	19.70	23.90	31.25

A-448 and A-451 are used for connecting Bell and Spigot Pipe with Flanged Pipe, Valves or Fittings.

Flanges faced only. Drilling extra.



A-460. TAPPED ELBOW.



A-463. TAPPED TEE.



A-466. TAPPED REDUCER.

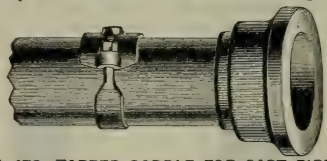
TAPPED ELBOWS AND TEES.—A-460, A-463, and A-466.

SIZE - - - - - - - - INCHES	3	4	6	8	10	12	14	16	18	20
TAPPED ELBOWS - - - EACH	2.25	3.00	4.50	7.00	9.50	12.00	16.00	30.00	35.00	40.00
TAPPED TEES - - - - EACH	3.50	5.00	7.50	12.00	15.00	19.00	29.00	33.00	50.00	55.00
TAPPED REDUCERS - - EACH	----	3.00	4.50	6.50	8.00	9.50	18.00	20.00	27.00	40.00

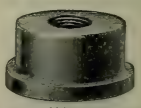
Fittings 6-inch and smaller tapped any size from ¾ to 2 inch; 8-inch and larger tapped any size from ¾ to 3 inch. In ordering state size of tapping desired.



A-469. TAPPED PLUG.



A-472. TAPPED SADDLE FOR CAST PIPE.



A-475. TAPPED CAP.

TAPPED PLUGS AND TAPPED CAPS.—A-469 and A-475.

SIZE - - - - - - - - INCHES	3	4	6	8	10	12	14	16	18	20
TAPPED PLUGS - - - - EACH	1.50	1.50	1.75	2.75	3.50	4.00	5.00	6.00	----	----
TAPPED CAPS - - - - EACH	1.75	1.75	2.00	3.00	3.75	4.50	5.50	6.50	----	----

Tapped Plugs and Tapped Caps form the best known connections between cast and wrought iron pipe.

CAST-IRON SADDLES FOR CAST-IRON WATER PIPE.—A-472.

FOR CAST PIPE - - - - - - - - SIZE	3	4	6	6	8	8	10	10
TAPPED FOR PIPE - - - - - - INCHES	¾ to 2	¾ to 2	¾ to 2	3	¾ to 2	3	¾ to 2	3
EACH - - - - - - - - - - - - - -	2.00	2.50	3.00	5.00	5.00	7.00	7.00	10.00

Saddles for larger sizes of Pipe made to order.

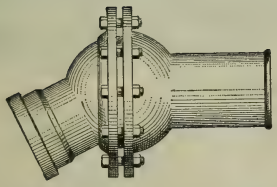


A-477. GAS DRIP BOXES

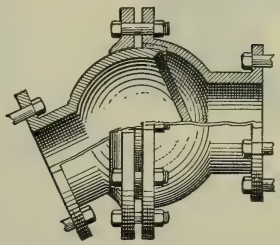
GAS DRIP BOXES.—A-477.

SIZE- - - - - - INCHES	3	4	6	8	10	12
WEIGHT- - - - POUNDS	363	403	443	652	1675	1775

Our new Drip Box has given excellent satisfaction. The body is cast solid, the cap fits into socket, the opening in cap is for 1-inch pipe, and both are arranged for lead joint. All sizes, including 12-inch, carried in stock. Larger sizes made to order promptly.



A-480. HUB AND SPIGOT ENDS.



A-482. FLANGED ENDS (SECTIONAL VIEW).

FLEXIBLE BALL JOINTS.—A-480 and A-482.

SIZE . . . . . INCHES	4	6	8	10	12	14	16	18	20	24	30	36	48
HUB AND SPIGOT . . EACH	16.00	20.00	30.00	32.00	33.00	60.00	70.00	90 00	100.00	120.00	200.00	300.00	450.00
FLANGED ENDS . . . EACH	16.00	20.00	30.00	32.00	33.00	60.00	70.00	90.00	100.00	120.00	200.00	300.00	450.00
DIAM. OF FLANGES . INCHES	9	11	13½	16	19	21	23½	25	27½	32	38¼	45¾	59½

These joints can be furnished with Hub Ends at same price.



A-485. PLAIN LAMP.



*A-487. BOULEVARD LAMP.

STREET LAMPS.—A-485 and A-487.

A-485. SQUARE TOP PLAIN LAMP, 17X17X42 INCHES . EACH	5.00
A-487. BOULEVARD LAMP . . . . . EACH	18.00

* A-487. Boulevard Lamp has Ornamental Iron Frame, Spun Copper Ventilator, Opal Dome and Clear Glass Globe.

We make a complete line of Ornamental Lamps. Special Catalogue on application.

LAMP POSTS.—A-492 and A-494.

STYLE	A-492	A-494
PRICE . . . . . EACH	11.00	18.00
APPROXIMATE WEIGHT, WITH LAMP . . . POUNDS	200	250

Our Lamp Posts are well made, light and strong.



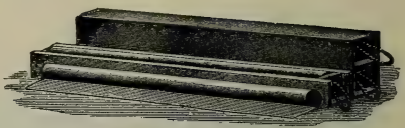
A-492. IRON LAMP POST.



A-494. BOULEVARD LAMP POST.



A-500. LEAD PIPE.



A-502. SHEET LEAD.

WEIGHTS AND SIZES OF LEAD PIPE.—A-500.

CALIBER.	Weight. Per Foot.		CALIBER.	Weight. Per Foot.		CALIBER.	Weight. Per Foot.		CALIBER.	Weight. Per Foot.	
	Lbs.	Ozs.		Lbs.	Ozs.		Lbs.	Ozs.		Lbs.	Ozs.
¼ in. Tubing	--	6	⅜ in. Ex. ex. Strong	3	8	1¼ in. Strong	4	12	2½ in. Waste	4	--
Fish Seine	--	15	¾ in. Aqueduct	1	--	Ex. Strong	6	--	Light	6	--
⅜ in. Aqueduct	--	8	Ex. Light	1	8	Ex. ex. Strong	6	12	Medium, $\frac{3}{16}$ Thick	8	--
Ex. Light	--	10	Light	2	--	1½ in. Aqueduct	3	--	Strong, ¼ "	11	--
Light	--	12	Medium	2	4	Ex. Light	3	8	Ex. Strong, $\frac{5}{16}$ "	14	--
Medium	1	--	Strong	3	--	Light	4	--	Ex. ex. Strong, ⅜ "	17	--
Strong	1	8	Ex. Strong	3	8	Medium	5	--	3 in. Waste	3	8
Ex. Strong	2	--	Ex. ex. Strong	4	--	Strong	6	--	Light	6	3
½ in. Aqueduct	--	10	⅞ in. Aqueduct	1	8	Ex. Strong	7	8	Medium, $\frac{3}{16}$ Thick	9	--
Ex. Light	--	12	Ex. Light	2	--	Ex. ex. Strong	9	--	Strong, ¼ "	12	--
Light	1	--	Light	2	8	1¾ in. Ex. Light	3	12	Ex. Strong, $\frac{5}{16}$ "	16	--
Medium	1	4	1 in. Aqueduct	1	8	Light	4	8	Ex. ex. Strong, ⅜ "	20	--
Strong	1	12	Ex. Light	2	--	Medium	5	8	3½ in. Waste	5	--
AA	2	--	Light	2	8	Strong	6	8	Strong, ¼ Thick	15	--
Ex. Strong	2	8	Medium	3	4	Ex. Strong	8	--	Ex. Strong, $\frac{5}{16}$ "	18	--
Ex. ex. Strong	3	--	Strong	4	--	2 in. Waste	3	--	4 in. Waste	5	--
⅝ in. Aqueduct	--	12	Ex. Strong	4	12	Ex. Light	4	--	Medium	10	--
Ex. Light	1	4	Ex. ex. Strong	5	8	Light	5	--	Strong, ¼ Thick	16	--
Light	1	12	1½ in. Aqueduct	2	--	Medium	7	--	Ex. Strong, $\frac{5}{16}$ "	22	--
Medium	2	--	Ex. Light	2	8	Strong	8	--	Ex. ex. Strong, ⅜ "	25	--
Strong	2	8	Light	3	--	Ex. Strong	9	--	5 in. Waste	8	--
Ex. Strong	3	--	Medium	3	12	Ex. ex. Strong	10	8			

Coils of Supply Pipe weigh about 200 pounds; Aqueduct about 90 pounds; Suction Pipe 100 to 180 pounds each.

PURE BLOCK TIN PIPE.

SIZE, INSIDE DIAMETER - INCHES	$\frac{3}{16}$	¼	$\frac{5}{16}$	⅜	½	⅝	¾	1	1¼	1½	2
WEIGHT PER FOOT - - OUNCES	4	4, 5, 6	4, 5, 6, 8	4, 5, 6, 8	5, 6, 8, 10	9, 12, 16	9, 12, 16	12, 16	20, 28	24 and upward	32 and upward

WEIGHTS AND SIZES OF SHEET LEAD.—A-502.

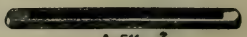
THICKNESS - - - - INCHES	$\frac{1}{24}$	$\frac{1}{20}$	$\frac{1}{15}$	$\frac{1}{16}$	$\frac{1}{14}$	$\frac{1}{12}$	$\frac{1}{10}$	$\frac{1}{9}$	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{1}{6}$	$\frac{3}{16}$	$\frac{1}{5}$
POUNDS - - PER SQUARE FOOT	2½	3	3½	4	4½	5	6	7	8	9	10	11	12



A-505.
Pigs weigh about 100 pounds.
Market rates.



A-508.
Pigs weigh about 100 pounds.
Market rates.



A-511.
50 x 50. 48 x 52. 40 x 60.
Market rates.



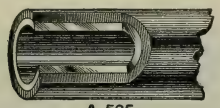
A-514. BABBITT METAL.
All grades. Market rates.



A-517. SOLDER.
Triangular Bars. Market rates.



A-520. INGOT COPPER.
Market rates.



A-525.

TIN-LINED AND LEAD-LINED IRON PIPE.

10-FOOT LENGTHS, THREADED, WITHOUT COUPLINGS.

INSIDE DIAMETER - - - - - - - - - - - - - INCHES	½	¾	1	1¼	1½	2
PRICE - - - - - - - - - - - - - - - - - PER FOOT	.33	.40	.53	.69	.86	1.06

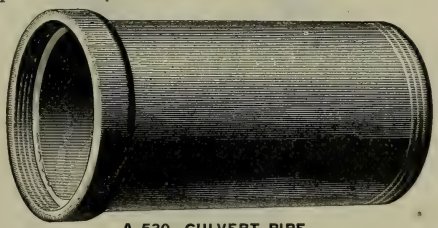
FITTINGS FOR TIN-LINED OR LEAD-LINED PIPE.

SIZE - - - - - - - - - - - - - - - - - - - INCHES	½	¾	1	1¼	1½	2
ELBOWS - - - - - - - - - - - - - - - - EACH	.28	.35	.50	.85	1.10	1.50
COUPLINGS - - - - - - - - - - - - - - - EACH	.25	.37	.50	.60	.90	1.35
TEES - - - - - - - - - - - - - - - - - - EACH	.40	.50	.75	1.00	1.30	1.75
REDUCING COUPLINGS - - - - - - - - - - EACH	.32	.45	.65	.90	1.12	1.85
REDUCING ELBOWS - - - - - - - - - - - EACH	.35	.45	.62	1.10	1.40	1.90
REDUCING TEES - - - - - - - - - - - - EACH	.50	.63	.95	1.25	1.65	2.20
45° ELBOWS - - - - - - - - - - - - - - EACH	.34	.42	.70	1.02	1.32	1.80
NIPPLES, CLOSE - - - - - - - - - - - - EACH	.25	.30	.40	.60	.90	1.25

Tin-lined Pipe is made by pouring melted tin into a wrought-iron pipe. While melted, the tin is inseparably united to the iron, and the result is one solid pipe, composed of two metals which *can not be torn apart.* It is essentially different from iron pipe merely dipped in tin, and immeasurably superior to iron pipe lined with a separate tin pipe that will become detached. Its fittings are lined with tin to match. Hot water will not injure it, rats will not gnaw it, and thieves will not cut it out. Either hot or cold water may stand in block tin pipes, and yet be drawn from them pure and free from poison or rust.

Lead-lined Pipe is made in the same way, and insures delivering the water to the house just as it comes from the mains unchanged by the chemical action which often results from contact with wrought-iron pipe.

For enameled Cast-Iron Pipe see Soil Pipe section.



A-530. CULVERT PIPE.

THOROUGHLY VITRIFIED AND SALT GLAZED.

This double strength Culvert Pipe makes a strong, reliable Culvert for railroads and wagon roads. Large quantities are used for these purposes. Its quality and construction have been greatly improved in late years, notably in the Corrugated Deep Sockets. It is also made in greater lengths than formerly, and in larger sizes, up to 36-inch. Difficulties in producing the large sizes in sufficient strength have now been overcome by improved methods and facilities and the large Pipe may be relied upon to withstand the weight of heavy embankments.

CULVERT PIPE.—A-530.

IN TWO AND ONE-HALF FOOT LENGTHS. IMPROVED CORRUGATED DEEP SOCKET AND CORRUGATED ENDS.

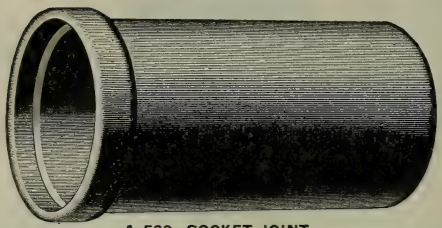
SIZE - - - - - - - - - - - - - - - - INCHES	12	15	18	21	24	27	30	36
PRICE - - - - - - - - - - - - - - - PER FOOT	.75	1.00	1.50	2.00	2.50	3.25	4.00	6.00
WEIGHT PER FOOT - - - - - - - - - POUNDS	52	76	103	136	170	240	305	390
THICKNESS - - - - - - - - - - - - INCHES	1⅛	1¼	1½	1⅝	2	2¼	2½	2¾

SEWER PIPE.

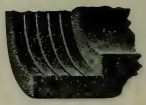


COMMON SOCKET.

3 to 7 inch Pipe is made with Common Socket; 8 to 12-inch either Common or Corrugated, as ordered.



A-532. SOCKET JOINT.



CORRUGATED DEEP SOCKET

Above 12-inch, all sizes have deep Sockets corrugated inside and are corrugated on outside of Spigot end.

SIZE - - - - - - - - INCHES	2	3	4	5	6	8	9	10	12	15	18	20	24
PRICE PER FOOT - - - - -	.12	.15	.20	.25	.30	.40	.50	.60	.75	1.00	1.50	1.75	2.50
WEIGHT PER FOOT - POUNDS	6	8	10	12	16	22	26	32	45	63	84	99	120
AREA IN INCHES - - - - -	3.141	7.068	12.566	19.635	28.274	50.265	63.617	78.539	113.09	176.71	254.46	314.16	452.39

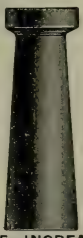
Ring Pipe, same list as above. Made only in sizes 6, 9, 12, 15, and 18 inches.



A-533. Y BRANCH.



A-534. TEE BRANCH.



A-535. INCREASER.



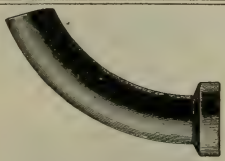
A-536. REDUCER.

Y BRANCHES AND TEE BRANCHES.—A-533 and A-534.

SIZE - - - - - - - - INCHES	2	3	4	5	6	8	9	10	12	15	18	20	24
PER FOOT - - - - - - - -	.25	.30	.40	.50	.60	.80	1.00	1.20	1.50	2.00	3.00	3.50	5.00

INCREASERS AND REDUCERS.—A-535 and A-536.

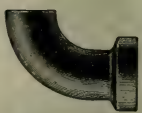
SIZE - - - - - - - - INCHES	2	3	4	5	6	8	9	10	12	15	18	20	24
PER FOOT - - - - - - - -	----	.23	.30	.38	.45	.60	.75	.90	1.13	1.50	2.25	2.63	3.75



A-538. 2-FOOT CURVE.



A-539. 1-FOOT CURVE.



A-540. ELBOW.

CURVES AND ELBOWS.—A-538, A-539, and A-540.

SIZE - - - - - - - - INCHES	2	3	4	5	6	8	9	10	12	15	18	20	24
EACH - - - - - - - - - -	.40	.50	.60	.75	1.00	1.50	1.75	2.10	2.75	3.75	4.75	5.75	8.00



A-545.
SLANT, 1 OR 2 FOOT.



A-546. S TRAP.



A-547. P TRAP.



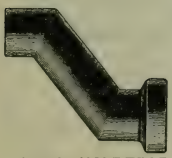
A-548. RUNNING TRAP.

SLANTS.—A-545.

SIZE - - - - - - - - - - - - - INCHES	6	8	9	10	12	15	18	20	24
PER FOOT, LONG SIDE - - - - - -	.45	.60	.75	.90	1.15	1.50	2.25	2.65	3.75

TRAPS.—A-546, A-547, and A-548.

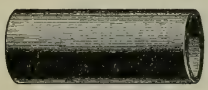
SIZE - - - - - - - - INCHES	2	3	4	5	6	8	9	10	12	15	18	20	24
EACH - - - - - - - - - -	1.00	1.20	1.60	2.00	2.40	3.20	4.00	5.00	8.00	10.00	----	----	----
WITH HAND HOLE - - - EACH	----	1.70	2.10	2.50	2.90	3.70	4.50	5.50	8.50	10.50	----	----	----



A-550. HALF TRAP.



A-551. RUNNING TRAP WITH VENT.



A-552. RING PIPE.



A-553. RING.

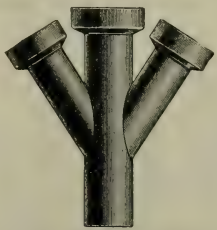
TRAPS.—A-550 and A-551.

SIZE - - - - - - - - - - - - INCHES	3	4	5	6	8	9	10	12	15
A-550 - - - - - - - - - - - EACH	----	----	1.50	2.00	3.00	3.50	4.50	6.00	8.00
A-551 - - - - - - - - - - - EACH	1.70	2.10	2.50	2.90	3.70	4.50	5.50	8.50	10.50

Ring Pipe, same list as Socket Joint Pipe, made only in sizes 6, 9, 12, 15, and 18 inches.



A-555. V BRANCH.



A-556. DOUBLE Y BRANCH.



A-557. DOUBLE TEE BRANCH.

DOUBLE BRANCHES.—A-555, A-556, and A-557.

SIZE - - - - - - - - - - - - INCHES	3	4	5	6
EACH - - - - - - - - - - - - -	.90	1.20	1.50	1.80



A-560. GUTTER PIPE.



A-562. CONDUIT PIPE.

GUTTER PIPE.—A-560.

VITRIFIED AND SALT GLAZED.

DIAMETER ..... INCHES	4	6	8	10	12
PRICE ..... PER FOOT	.06	.10	.15	.20	.25

Larger Sizes to order.

CONDUIT PIPE.—A-562. In Breweries, Power Houses, Refrigerating Plants, Steam Flour Mills, Gas Plants, and nearly all places where Steam or Hot Water Pipe is used, particularly where Iron Pipe must be laid underground, it is often necessary to use a Pipe Covering to prevent corrosion, waste of heat, or as protection from electric wires. For this purpose, there is nothing better than the Glazed Clay Conduit. It is easily installed, inexpensive, and practically indestructible. It is made with flange joints and fits tightly. Used on a heating system it is a saver, keeping the heat in the pipes. Prices upon application.



A-564.

CEMENT.

PORTLAND, GERMANIA, UTICA, LOUISVILLE, ETC.

In Barrels or in Bags. Prices upon application.



A-565.

VITRIFIED DRAIN TILE.

INSIDE DIAMETER ..... INCHES	3	4	5	6
PRICE ..... PER 1000 FEET	30.00	40.00	50.00	70.00
CURVES AND Y-BRANCHES ..... EACH	.30	.35	.40	.50
WEIGHT PER FOOT ..... POUNDS	6	8	10	14
CARLOADS OF 15 TONS ..... FEET	5000	3800	3000	2150

The above price list is subject to large discounts. On carloads Drain Tile, or carloads part Drain Tile and part Sewer Pipe, we make prices delivered at destination. On less than carloads we make prices f. o. b. Chicago only.

Our Farm Drain Tile is superior to the Drain Tile in general use for several reasons. The old idea that farm Drain Tile should be made soft and porous so as to absorb moisture has long since been exploded and proven to be incorrect. The experience of the largest, the thriftiest and the most enterprising farmers of the West has proven conclusively that Hard Burned Tile is best, as it retains its shape, its strength and all its good qualities, no matter how long it remains in the ground.

CARRYING CAPACITY OF SEWER PIPE. (Gallons per Minute.)

PIPE SIZE ..... INCHES	3	4	6	8	9	10	12	15	18	24	27	30	36
1-INCH FALL PER 100 FT., GALS. PER MIN.	13	27	75	153	205	267	422	740	1168	2396	4407	5906	9707
2-INCH FALL PER 100 FT., GALS. PER MIN.	19	38	105	216	290	378	596	1021	1651	3387	6211	8352	13769
3-INCH FALL PER 100 FT., GALS. PER MIN.	23	47	129	265	355	463	730	1282	2022	4155	7674	10223	16816
6-INCH FALL PER 100 FT., GALS. PER MIN.	32	66	183	375	503	755	1033	1818	2860	5874	10883	14298	23763
9-INCH FALL PER 100 FT., GALS. PER MIN.	40	81	224	460	617	803	1273	2224	3508	7202	13257	17714	29284
1-FOOT FALL PER 100 FT., GALS. PER MIN.	46	93	258	527	712	926	1468	2464	4045	8303	15344	20204	33722
2-FOOT FALL PER 100 FT., GALS. PER MIN.	64	131	364	750	1006	1310	2076	3617	5704	11744	21771	28129	47523
3-FOOT FALL PER 100 FT., GALS. PER MIN.	79	163	450	923	1240	1613	2554	4467	7047	14466	26622	35513	58406

When the area to be drained and the fall of the sewer per hundred feet are known, the size of the pipe required can be easily ascertained by referring to the above table, which shows the number of gallons discharged per minute by specified sizes and grades. In main sewers this flow, of course, is greatly increased by the added pressure of connecting laterals.

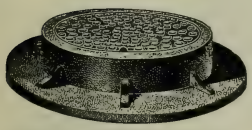
Statistics show the maximum rainfall to be about one inch per hour, except during very heavy and uncommon storms.

One-inch rainfall per hour gives 22,633 gallons per hour for each acre, or 377 gallons per minute per acre.

Experience shows that owing to various obstructions, not over 50 or 75 per cent of the rain falling will reach the drain within the same hour. Due allowance should be made for this fact in determining the size of pipe required, as severe storms are generally of short duration.

All authorities agree that these pipes have a carrying capacity of 50 per cent over brick sewers of the same size.

MANHOLE COVERS FOR VALVES AND SEWERS.

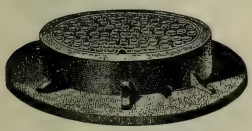


A-570. CHICAGO STANDARD MANHOLE CURB WITH SOLID COVER.

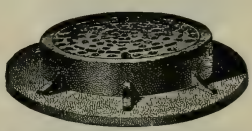


A-571. CHICAGO STANDARD MANHOLE CURB WITH PERFORATED COVER.

CHICAGO STANDARD.	Diameter of Opening, Inches.	Height above Flange, Inches.	Projection of Flange, Inches.	Approximate Weight, Pounds.	Price, Complete.
A-570. CHICAGO STANDARD, WITH SOLID COVER . . . . EACH	22¾	8¼	5½	481	15.00
A-571. CHICAGO STANDARD, WITH PERFORATED COVER . EACH	22¾	8¼	5½	465	15.00

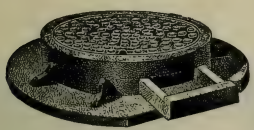


A-572. SUBURBAN STANDARD MANHOLE CURB WITH SOLID COVER.

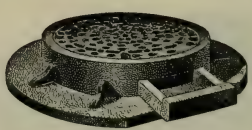


A-573. SUBURBAN STANDARD MANHOLE CURB WITH PERFORATED COVER.

SUBURBAN STANDARD.	Diameter of Opening, Inches.	Height above Flange, Inches.	Projection of Flange, Inches.	Approximate Weight, Pounds.	Price, Complete.
A-572. SUBURBAN STANDARD, WITH SOLID COVER . . . EACH	22¾	8¼	5½	331	11.25
A-573. SUBURBAN STANDARD, WITH PERFORATED COVER EACH	22¾	8¼	5½	315	11.25



A-574. CATCH-BASIN CURB. WITH SOLID COVER.



A-575. CATCH-BASIN CURB, WITH PERFORATED COVER.

CHICAGO STANDARD.	Diameter of Opening, Inches.	Height above Flange, Inches.	Projection of Flange, Inches.	Drainage Inlet, Inches.	Approximate Weight, Pounds.	Price, Complete.
A-574. CATCH-BASIN CURB . . . . . EACH	22¾	8½	5½	4½ x 12	560	18.00
A-575. CATCH-BASIN CURB . . . . . EACH	22¾	8½	5½	4½ x 12	544	18.00



A-580. LIMESTONE CATCH-BASIN COVER.

LIMESTONE SEWER OR CATCH-BASIN COVERS.—A-580.

LIMESTONE COVER ONLY, 36 INCHES DIAMETER	EACH	3.50
LIMESTONE COVER ONLY, 30 INCHES DIAMETER	EACH	3.50
IRON MANHOLE PLATE ONLY, 18 INCHES DIAMETER	EACH	.75



A-581. SIDEWALK CATCH-BASIN CURB.



A-582. SIDEWALK DRAIN CURB.

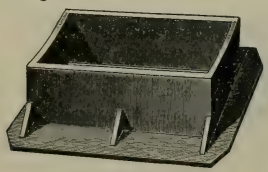
SIDEWALK CATCH-BASIN CURB.—A-581.

SIDEWALK CATCH-BASIN CURB.	Diameter of Opening, Inches.	Projection of Flange, Inches.	Height above Flange, Inches.	Drainage Inlet, Inches.	Approximate Weight, Pounds.	Price, Each.
A-581, WITH LIGHT COVER . . . . . EACH	19½	3½	5½	4x10	190	7.55

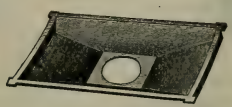
SIDEWALK DRAIN CURB.—A-582.

SIDEWALK DRAIN CURB.	Diameter of Opening, Inches.	Diameter of Flange, Inches.	Height above Flange, Inches.	Approximate Weight, Pounds.	Price, Each.
A-582, WITH GRATE . . . . . EACH	8x12	24	4	125	5.75

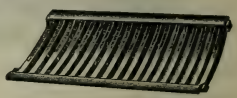
Our Sidewalk Drain Curbs are used in sidewalks, driveways and gutters. They are very strong, and can be safely placed in gutters.



A-583. GUTTER CURB.



A-584. GUTTER CURB PAN.

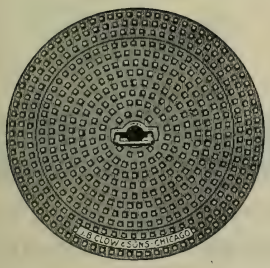


A-585. GUTTER CURB GRATE.

GUTTER CURBS, PANS, AND GRATES.—A-583, A-584, and A-585.

COMPLETE GUTTER CURB, PAN AND GRATE, APPROXIMATE WEIGHT, 310 POUNDS	EACH	14.00

Length of opening, 23⅜ inches; width of opening, 13¼ inches; height above flange, 8⅞ inches; projection of flange, 4½ inches

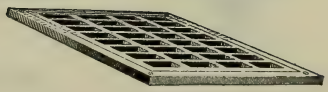


A-590.

VAULT COVER WITH RIM.

EXTRA HEAVY.

Diameter over all,	Inches	24
Diameter of Opening,	Inches	18
Price,	Each	$11.25



A-592.

GRATING WITH LOOSE FRAME.

Size, Inches	8 x 8	10 x 10	13¾ x 13¾
Price, Grating only	$ .80	$1.30	$1.90
Price, Grating and Frame,	1.10	1.70	2.50



A-594.

GRATING.

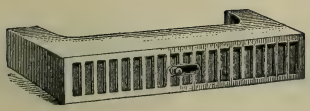
Size,	Inches	9½ x 9½
Price,	Each	$1.35



A-596.

FRESH AIR SIDEWALK GRATING.

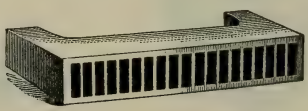
Size of Frame,	Inches	14 x 5
Size of Grating,	Inches	12 x 3¼
Iron,	Each	$ 1.25
Brass,	Each	12.50



A-598.

AIR BRICK WITH SLIDING VENTILATOR.

Size,	Inches	8½ x 2½
Price,	Each	$2.35

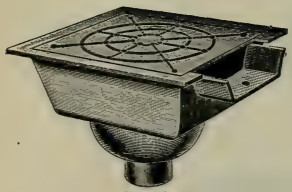


A-600.

AIR BRICK.

Size,	Inches	8½ x 2½
Price,	Each	$2.00

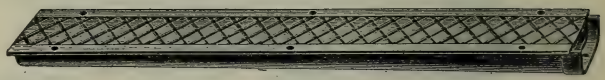
BELL TRAPS AND GUTTERS.



A-602.

GUTTER BELL TRAP.

Size,	Inches	12 x 12
Outlet,	Inches	3
Price,	Each	$6.25

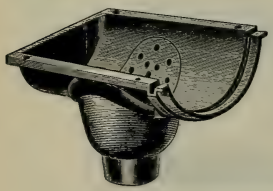


*A-603.

GRADED GUTTER WITH MOVABLE CORRUGATED COVER.

Width,	Inches	7
Price,	Per lineal foot	$1.75

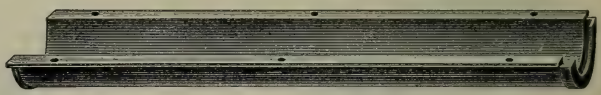
*A-603. Graded Gutter has a fall of $\frac{1}{16}$-inch to the foot. It will be furnished without the grade when so ordered.



A-605.

GUTTER BELL TRAP.

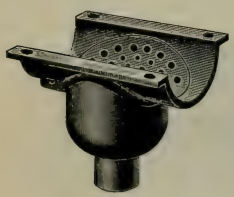
Size,	Inches	8 x 10
Outlet,	Inches	3
Price,	Each	$5.00



A-606.

OPEN GUTTER, DEEP PATTERN.

Width,	Inches	8
Price,	Per lineal foot	$1.90



A-608.

GUTTER BELL TRAP.

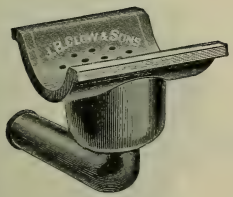
Size,	Inches	7 x 8	9 x 10
Outlet,	Inches	3	3
Price,	Each	$4.40	$6.90



A-609.

OPEN GUTTER, SHALLOW PATTERN.

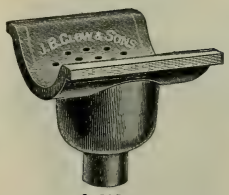
Width,	Inches	7	9
Price,	Per lineal foot	$ .70	$ .95



A-612.

GUTTER BELL TRAP, SIDE OUTLET.

Size,	Inches	9 x 9	13 x 13
Outlet,	Inches	3	4
Price,	Each	$7.00	$9.00

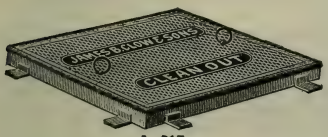


A-613.

GUTTER BELL TRAP.

Size,	Inches	9 x 9	13 x 13
Outlet,	Inches	3	4
Price,	Each	$6.00	$7.00

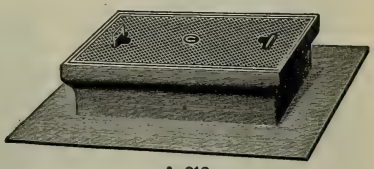
These Bell Traps are designed to be used where gutter is moulded in cement or concrete floor. When wanted with one end closed, add 50 cents.



A-615.

CLEANOUT COVER AND FRAME.

Size,	Inches	27 x 27
Price,	Each	$12.00



A-616.

*FRAME AND COVER.

FOR STRAIGHT RUN CLEANOUT MANHOLES.

Top of Frame, outside diameter,	Inches	21 x 33
Base of Frame, outside diameter,	Inches	27 x 39
Total Height,	Inches	4
Price,	Each	$15.00

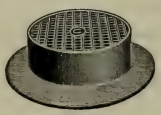
*A-616 is suitable for 4 to 6-inch Pipe. These Frames can be furnished larger or smaller, as desired.



A-618.

CLEANOUT COVER AND FRAME.

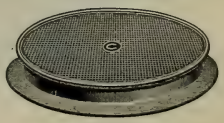
Opening, diameter,	Inches	18
Top, outside diam.,	Inches	22
Price	Each	$5.50



A-619.

INSPECTION COVER.

Top, outside diam.,	Inches	8
Base, outside diam.,	Inches	12
Total height,	Inches	6
Price,	Each	$6.00



A-620.

CLEANOUT COVER AND FRAME.

Opening, diameter,	Inches	18
Top, outside diam.,	Inches	22
Base, outside diam.,	Inches	28
Price,	Each	$6.50



A-625. CAST IRON BLOW-OFF BASIN.

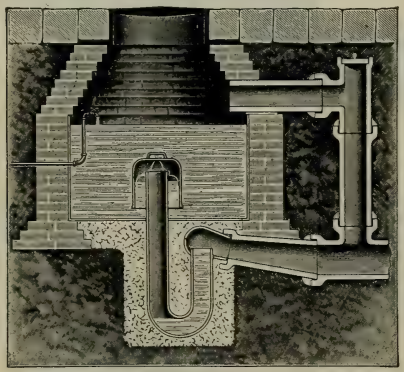
CAST IRON BLOW-OFF AND CATCH BASINS.



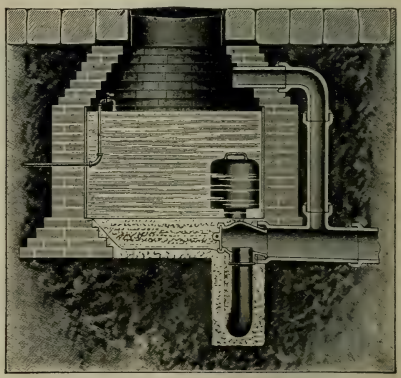
A-626. CAST IRON CATCH BASIN.

DEPTH	INCHES	30	44
DIAMETER	INCHES	26	26
FOR 6 OR 8-INCH PIPE, FLANGED, SCREWED OR HUB ENDS	EACH	30.00	44.00

These Basins, to be used as Down Spouts, Grease Basins, Blow-off Basins, etc., will be furnished for either 6 or 8-inch Cast and Wrought Iron or Vitrified Clay Pipe. They can be made in any depth or diameter, to order. Basins of special pattern also made to order. Prices upon application.



A-628. AUTOMATIC SIPHON FLUSH TANK.



*A-629. FLUSH TANK AND MANHOLE

SEWER FLUSHING TANKS.—A-628 and A-629.

DIAMETER OF SEWER	INCHES	4–6	6–8	8–10	12–15
DIAMETER OF SIPHON	INCHES	3	5	6	8
DIAMETER OF TANK	FEET	2	4	4½	5
DISCHARGING DEPTH OF TANK	INCHES	18	28	37	42
DISCHARGING CAPACITY	CUBIC FEET	4.5	25	42	65
DISCHARGE PER SECOND	GALLONS	1½	5	7½	15
WATER REQUIRED TO FILL 100 LINEAL FEET OF SEWER	CUBIC FEET	8.7–20	20–35	35–55	80–122
WITH SIPHONS OF STANDARD LENGTH	EACH	30.00	40.00	45.00	50.00

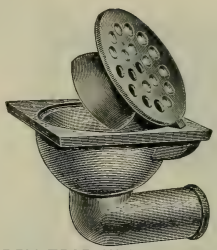
Sewer Flushing Tanks of any design. Prices upon application.

*By removing small lid at bottom, Tank may be drained and converted into a manhole.



A-630. BELL TRAP, HINGED.

Size	Inches	6 x 6	9 x 9	13 x 13
Size of Outlet	Inches	2	3	4
Iron, Painted	Each	.85	1.50	3.75
Iron, Galv.	Each	2.00	3.00	7.50
Brass, Finished	Each	3.50	6.50	12.00
Brass, N. P.	Each	4.25	7.75	14.00



A-631. BELL TRAP, HINGED, SIDE OUTLET.

Size	Inches	6 x 6	9 x 9	13 x 13
Size of Outlet	Inches	2	3	4
Iron, Painted	Each	1.35	2.25	4.75
Iron, Galv.	Each	2.50	3.75	8.50
Brass, Finished	Each	4.00	7.25	13.00
Brass, N. P.	Each	4.75	8.50	15.00



A-635. BELL TRAP.

Size	Inches	6 x 6	9 x 9	13 x 13
Size of Outlet	Inches	2	3	4
Iron, Painted	Each	.75	1.00	2.50
Iron, Galv.	Each	1.50	2.00	5.00



BELL TRAP, SECTIONAL VIEW.



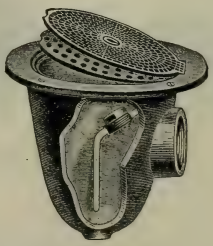
A-636. BELL TRAP, SIDE OUTLET.

Size	Inches	6 x 6	9 x 9	13 x 13
Size of Outlet	Inches	2	3	4
Iron, Painted	Each	1.25	1.75	3.50
Iron, Galv.	Each	2.00	2.75	6.00



A-640. COMBINED FLOOR DRAIN AND TRAP.

Size of Inlet	Inches	2	3	4
Diam. of Top	Inches	9	11	13
Depth	Inches	8	11	13
With Finished Brass Top and Strainer	Each	7.75	9.00	11.25
With N. P. Brass Top and Strainer	Each	8.25	10.00	12.25



A-641. FLOOR DRAIN AND TRAP, WITH SOLID COVER.

Size of Inlet	Inches	2	3	4
Diam. of Top	Inches	9	11	13
Depth	Inches	8	11	13
With Finished Brass Top, Strainer and Cover	Each	10.25	13.50	18.25
With N. P. Brass Top, Strainer and Cover	Each	10.75	14.50	19.25

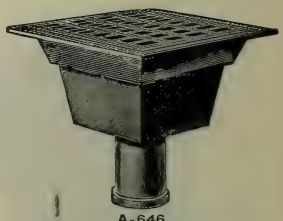
NOTE.—Drains with 2-inch Outlet are all Brass; larger sizes have Iron Body.



A-645
EXTRA HEAVY CESSPOOL.



EX. HY. CESSPOOL,
SECTIONAL VIEW.



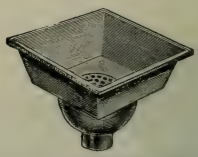
A-646
EX. HY. CESSPOOL, LONG OUTLET.

SIZE OF TOP . . . . . INCHES	16 x 16
DEPTH . . . . . INCHES	10
SIZE OF OUTLET . . . . . INCHES	4
PAINTED . . . . . EACH	4.50

SIZE OF TOP . . . . . INCHES	16 x 16
DEPTH . . . . . INCHES	10
SIZE OF OUTLET . . . . . INCHES	4
LENGTH OF OUTLET . . . . . INCHES	10
PAINTED . . . . . EACH	5.50



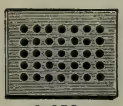
A-648 HYDRANT CESSPOOL.



A-649 HYDRANT CESSPOOL, BELL TRAP.
(LEAD CONNECTION.)

SIZE . . . . . INCHES	12 x 12	14 x 14	16 x 16
DEPTH . . . . INCHES	6	6	6
PAINTED . . . . EACH	1.00	1.15	1.30

SIZE . . . . . INCHES	12 x 12	14 x 14	16 x 16
DEPTH . . . . INCHES	6	6	6
PAINTED . . . . EACH	1.50	1.65	1.80



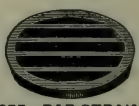
A-652.



A-653.



A-654.



A-655. BAR STRAINER.

CESSPOOL PLATES.—A-652, A-653 and A-654.

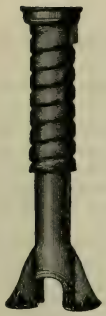
SIZE . . . . . INCHES	6 x 6	6 x 8	7 x 9	10 x 10	10 x 12	12 x 12
A-652 . . . . . EACH	.40	.50	----	----	----	----
A-653 . . . . . EACH	.50	----	----	----	----	----
A-654 . . . . . EACH	----	.50	.65	.90	1.05	1.20

BAR STRAINERS.—A-655.

SIZE . . . . . INCHES	4	5	6	7	8	9
A-655 . . . . . EACH	.20	.25	.30	.50	.65	.80



A-660.
2½-INCH BOX.



A-661.
3-INCH BOX.



A-662.
BOX WITH STOP-COCK HOLDER.



A-663.
EXTENSION SECTION.



A-664.
ENLARGED BASE.

SERVICE BOXES, 2½-INCH DIAMETER.—A-660.

FOR SERVICE COCKS 1¼-INCH AND SMALLER.

NUMBER OF BOX	88	89 A	90 B	91 C	92 C	92 D	93 D	93 E	94 D	94 E	95 E	100 E	100 F
EXTENDING INCHES	12	12–20	18–26	21–33	24–38	24–42	36–48	36–54	42–57	42–60	48–66	54–72	54–78
EACH	.55	.60	.65	.70	.73	.75	.80	.83	.85	.90	1.00	1.05	1.10

STANDARD SERVICE BOXES, 3-INCH DIAMETER.—A-661.

NUMBER OF BOX	0	1	1½	2	3	4	5	7
EXTENDING INCHES	10	13–21	18–28	24–39	32–48	34–58	42–66	48–72
EACH	.65	.80	.85	.90	1.00	1.05	1.15	1.30

SERVICE BOXES, 2½-INCH DIAMETER, WITH STOP-COCK HOLDER.—A-662.

NUMBER OF BOX	288	289	290	291	292	293	294	295	296	297	298	299	300
EXTENDING INCHES	12	12–20	18–26	21–33	24–38	24–42	36–48	36–54	42–57	42–60	48–66	54–72	54–78
EACH	.70	.75	.80	.85	.88	.90	.95	.98	1.00	1.05	1.15	1.20	1.25

STANDARD SERVICE BOXES, 3-INCH DIAMETER, WITH STOP-COCK HOLDER.—A-662.

NUMBER OF BOX	100	101	101½	102	103	104	105	107
EXTENDING INCHES	10	13–21½	18–28	24–36	32–48	34–58	42–66	48–72
EACH	.80	.95	1.00	1.05	1.15	1.20	1.30	1.45

EXTENSION SECTIONS.—A-663.

NUMBER OF BOX SECTION	151	152	153	154	155	156	157
INCREASING LENGTH OF BOX INCHES	9½	16½	28	33	20	24	30
2½-INCH DIAMETER EACH	.45	.55	.65	.75	----	----	----
3-INCH DIAMETER EACH	----	----	----	----	.55	.60	.65

ENLARGED BASE FOR SERVICE BOXES, 3-INCH DIAMETER.—A-664.

TO ALLOW USE OF 1½ OR 2-INCH COCKS EACH	1.50



A-668.
SECTIONAL VIEW OF SERVICE BOX,
SHOWING STATIONARY ROD IN POSITION.

NEW PATTERN EXTENSION SERVICE BOXES.—A-668.

WITH STATIONARY ROD ATTACHMENT.

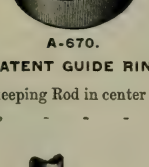
Water Works and Gas Companies frequently desire a stationary rod inside of Service Boxes, having the rod attached to Service Cock, and extending to within twelve or eighteen inches of the surface, thereby discarding the old style of long key for turning off or on. Our new method, for placing rods inside of the box, has been adopted by a number of water works, proving highly satisfactory.

This device for stationary rod can be used in connection with all lengths and sizes of service boxes manufactured by us. Its simplicity and convenience, together with moderate cost for the improvement, will commend its use wherever rods are desired with boxes.

SERVICE BOXES, 2½-INCH DIAMETER, WITH STATIONARY ROD AND RING GUIDE.—A-668

NUMBER OF BOX	388	389	390	391	392	393	394	395	396	397	398	399	40
EXTENDING INCHES	12	12–20	18–26	21–33	24–38	24–42	36–48	36–54	42–57	42–60	48–66	54–72	54–
EACH	.80	.85	.90	.95	.98	1.00	1.05	1.13	1.15	1.20	1.30	1.35	1.4

PARTS FOR SERVICE BOXES.



A-670.
PATENT GUIDE RING.
For keeping Rod in center of Box.
Each, - - - $ .20



A-671.

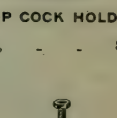


A-672.

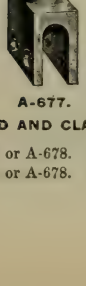


A-673.

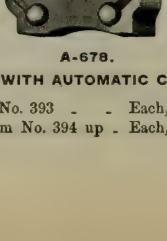
SERVICE BOX COVERS.
Covers will be lettered "Gas," "Water," etc., as desired.
Each, - - - $ .35



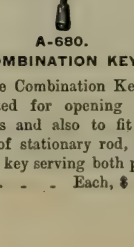
A-675.
STOP COCK HOLDE
Each, - - $



A-677.
ROD AND CLAMP.
A-677 or A-678. For Boxes to No. 393 - - Each, $ .50
A-677 or A-678. For Boxes from No. 394 up - Each, .60



A-678.
ROD WITH AUTOMATIC CLAMP.



A-680.
COMBINATION KEY.
The Combination Key is adapted for opening the covers and also to fit on end of stationary rod, the same key serving both purposes. - - Each, $ .35



A-681.
SCREW FOR COVE
Each, - - $



A-682.
KEY.
For opening Covers.
Each, - - $

VALVE BOXES.



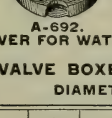
A-685. VALVE BOX.



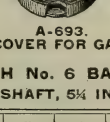
A-688.
SQUARE HEAD FOR VALVE BOX.



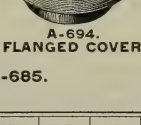
A-690.
VALVE BOX EXTENSION.



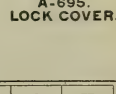
A-692.
COVER FOR WATER.



A-693.
COVER FOR GAS.



A-694.
FLANGED COVER.



A-695.
LOCK COVER.

VALVE BOXES WITH No. 6 BASE.—A-685.

DIAMETER OF SHAFT, 5¼ INCHES.

NUMBER OF BOX	AAA	AA	A	B	C	CC	D	DD	E	F	G	H
EXTENDING INCHES	17	22–28	28–40	36–48	42–54	48–60	42–65	48–72	60–72	60–84	72–84	72–96
EACH	3.25	3.80	4.00	4.20	4.40	4.65	4.85	5.10	5.25	5.50	5.75	6.00

SQUARE HEAD VALVE BOXES.—Valve Boxes with Square Head, as shown in A-688, will be furnished, when ordered, at ame price.

VALVE BOX EXTENSIONS.—A-690.

VALVE BOX EXTENSION NO. 58, SIZE 5¼ INCHES, INCREASING LENGTH 14 INCHES EACH	.65

BASES FOR VALVE BOXES.

STYLE OF BASE	No. 4 Round For 4-inch Valves.	No. 6 Round For 6 and 8-inch Valves.	No. 8 Round For 10-inch Round Valves.	No. 16 Round For 12 and 16-inch Round Valves.	No. 160 Oval For 10, 12 and 16-inch Oval Valves.	No. 162 Oval For 18 and 20-inch Oval Valves.
EACH	Deduct from net price of Box. .25	Included in net price of Box.	Add to net price of Box. .25	Add to net price of Box. 1.25	Add to net price of Box. .35	Add to net price of Box. 1.25

COVERS FOR VALVE BOXES.—Regular Covers, as shown in A-692 and A-693, are generally used. Price, each, $1.00. The langed Cover, as shown in A-694, will be furnished at same price, when preferred. Diameter of Regular Covers is 7¼ inches.

LOCK COVERS, as shown in A-695, will be furnished, when ordered, at an extra charge of 25 cents each. These are an dvantage over the loose covers as, when locked, the cover can not be tipped or misplaced by cart wheels, or when stepped n by horses.

LENGTH OF VALVE BOX.—It is unnecessary to have the Valve Box quite as long as the depth of the main pipe, as the ase of the box does not extend below the flange joint of valve dome, which is from 3 to 6 inches above the pipe.

DIRECTIONS FOR SETTING VALVE BOXES.

When setting a Valve Box in its place, the base should rest two or more inches above the flanged joints of the valve ome. The nut of valve should be about on a line with the hub or upper part of the Valve Box base where connected with pright shaft; this will leave ample space all around valve and prevent box touching it in any way.

We recommend the use of a larger size base over valves. In many places our No. 4 or No. 6 base is used on 16-inch alves and under; when such is the case the valves are covered by earth to within 12 inches of the top of the nut, the base f Valve Box completely protecting the working parts of the valve.



A-696.
WATER METER BOX.



A-697.
SHOWING DIAL AND METER ATTACHED.



A-699.
IRON METER FRAME AND COVER.



A-700.
CLOSED METER BOX.

WATER METER BOXES.—A-696.

LENGTH ..... INCHES	36	48	60	72
FOR ½ OR ⅝-INCH METERS ..... EACH	11.10	13.00	14.75	16.75
FOR ¾-INCH METERS ..... EACH	15.50	17.40	19.40	21.40
FOR 1-INCH METERS ..... EACH	21.30	23.75	26.20	28.60
ADAPTED FOR SERVICE ..... INCHES	28 to 38	40 to 50	52 to 62	64 to 74

This is the most practical, economical Meter Box made, easiest to set and easiest to use. It consists of a substantial Base of Galvanized Cast-Iron, and a Valve Box of the Buffalo adjustable screw pattern. To connect Meter, put on the special Bronze connections, lower Meter to the Base, give it a quarter turn and tighten two set screws with a key. They will take any standard make of Water Meter. On services over three feet use Extension Dials.

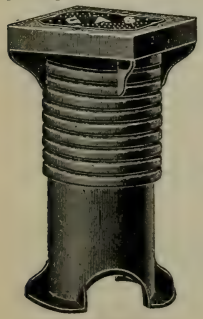
IRON METER FRAMES AND COVERS.—A-699.

SIZE ..... INCHES	24 x 24 Medium Weight.	24 x 24 Heavy.	24 x 24 Extra Heavy, for use in Streets.
EACH	6.00	8.00	18.00

CLOSED METER BOXES.—A-700.

FOR ⅝, ¾, AND 1-INCH METERS ..... EACH	6.00

By calking joints, this box can be made water-tight, and the Meter protected in winter by filling box with suitable packing.



A-702. TEST BOX.

EXTENSION TEST VALVE BOXES.—A-702.

Gas Companies will find our Extension Test Valve Box a valuable auxiliary in street work. It is 12 inches inside diameter, and is formed of two sections which screw together. It is easily adjusted to depth of trench, to conform to street grade. It is now being largely used by Gas Companies.

We also make an Extension Section, as shown, increasing length of box one foot; by use of one or more of them, any desired length of box may be obtained.

NUMBER OF BOX	200	201
EXTENDING ..... INCHES	18 to 26	24 to 37
PRICE ..... EACH	5.50	6.50

A-704 Extension No. 100, increasing length of box one foot, each $1.25. Covers will be lettered "Gas," "Test Valve," etc., as desired.



A-704. EXTENSION.



A-705.
ROUND TOP,
FLANGED BASE.



A-706.
ROUND TOP
OPEN BASE.



A-708.
LOCK COVER.
Each, $1.25.



A-709.
PLUG COVER.
Each, $1.00.



A-711.
SQUARE TOP,
FLANGED BASE.



A-712.
SQUARE TOP,
OPEN BASE.

ROADWAY BOXES WITH FLANGED BASE.—A-705.

DIAMETER OF BOX, 4¼ INCHES.

NUMBER OF BOX	41 Q	42 Q	42 R	43 R	44 R	45 R
EXTENDING INCHES	18 to 24	27 to 34	27 to 42	34 to 48	39 to 54	46 to 60
EACH	2.45	2.65	2.95	3.10	3.20	3.30

ROADWAY BOXES WITH OPEN BASE.—A-706.

DIAMETER OF BOX, 4¼ INCHES.

NUMBER OF BOX	141 Q	142 Q	142 R	143 R	144 R	145 R
EXTENDING INCHES	18 to 24	27 to 34	27 to 42	34 to 48	39 to 54	46 to 60
EACH	2.45	2.65	2.95	3.10	3.20	3.30

Extension Section No. 49.—To extend Roadway and extra large Service Boxes. 18 inches, add to list, $1.00.

Roadway Boxes with square tops, as shown in A-711 and A-712, furnished to order at same price as round.

Our Roadway Boxes are for water or gas, of double thick metal and extra large diameter for 3-inch valves and large services. They are strong enough to use in streets outside of curbstone, allowing heavy travel over them without injury.



A-714. GAS DRIP BOX.

GAS DRIP BOXES WITH LOCK COVER.—A-714.

LENGTH	INCHES	16
OUTSIDE DIAMETER	INCHES	9
SQUARE FLANGE	INCHES	15 x 15
PRICE	EACH	3.00



A-716.
PEERLESS BOX.

PEERLESS ADJUSTABLE EXTENSION STOP-COCK BOXES.—A-716.

NUMBER	1	1½	2	3	4
EXTENSION, LONG PATTERN . . . . INCHES	24–48	24–54	36–60	42–66	48–72
EXTENSION, SHORT PATTERN . . . INCHES	12–24	-----	12–30	24–36	30–42
EXTENSION, MINN. PATTERN . . . . INCHES	24–48	24–54	36–60	42–66	48–72
LONG REGULAR PATTERN . . . . . EACH	1.50	1.58	1.67	1.75	1.84
SHORT REGULAR PATTERN . . . . EACH	1.20	-----	1.28	1.37	1.45
MINNEAPOLIS PATTERN . . . . . EACH	2.45	2.57	2.69	2.81	2.93

NUMBER	5	6	7	8	9
EXTENSION, LONG PATTERN . . . . INCHES	60–84	72–96	84–108	-----	-----
EXTENSION, SHORT PATTERN . . . INCHES	36–48	42–54	48–60	60–72	72–84
EXTENSION, MINN. PATTERN . . . . INCHES	60–84	72–96	84–108	96–120	108–132
LONG REGULAR PATTERN . . . . . EACH	2.01	2.18	2.35	-----	-----
SHORT REGULAR PATTERN . . . . EACH	1.54	1.62	1.71	1.88	2.05
MINNEAPOLIS PATTERN . . . . . EACH	3.17	3.41	3.65	3.89	4.13



A-716.
SECTIONAL VIEW.

REPAIRS FOR PEERLESS BOXES.

STYLE	Regular and Long Pattern.	Short Pattern.	Minneapolis Pattern.
TOPS . . . . . EACH	.50	.50	1.00
COVERS . . . . . EACH	.25	.25	.35
BOTTOM SECTIONS . . . . . EACH	1.00	.50	1.50



A-718.
BARRY STOP BOX.

BARRY EXTENSION STOP BOXES.—A-718.

Barry Extension Stop Boxes are made in two sections and are of the style known as Telescope. The Top or Cover is of Brass, extra heavy, and will stand any amount of rough use. The Cover derives additional strength from the flanged Coupling directly under it; this Coupling also prevents the upper section from dropping down out of reach when the cover is removed.

The rod, for the purpose of attaching to the cock, is bent in such a manner that the flattened end is always held in the center of the box, and is readily reached with the key, the upper tube being a perfect guide for it.

Covers are furnished with the letter "W" or "Gas" cast in, as required.

LENGTH OF BOX WHEN EXTENDED . FEET	2	3	4	5	6	7	8	9	10
EACH	2.00	2.20	2.40	2.60	2.80	3.20	4.00	4.50	5.00

WITH EXTRA LARGE BASES.

LENGTH OF BOX WHEN EXTENDED . . . . . FEET	4	5	6	7	8	10
EACH	3.40	3.60	3.80	4.20	5.00	6.00

These boxes are adapted for Pipe, also Gate Valves, up to two-inch.

FOUNTAINS.

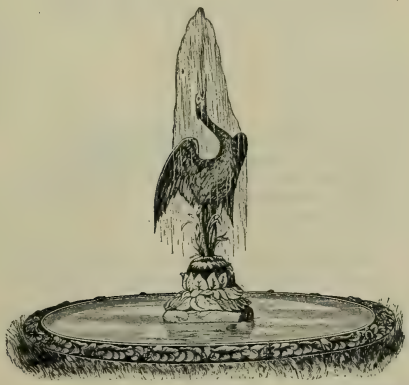
Our line of Fountains, Drinking Fountains, Watering Troughs, Garden Vases, etc., is too extensive for complete illustration in this book. Special Catalogues upon application.



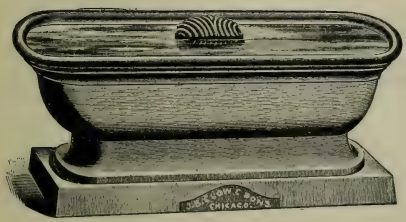
A-720.
DRINKING FOUNTAIN.



A-723.
DRINKING FOUNTAIN.



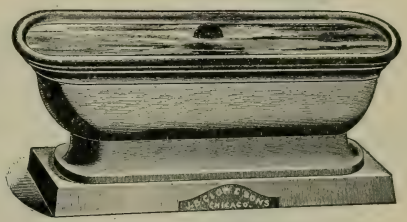
A-725. FOUNTAIN.



A-727. HORSE DRINKING FOUNTAIN.

This Drinking Fountain is provided with a Self-closing Cock which regulates the flow of water, allowing it to run only while the horse is drinking.

Painted, to fasten on stone,	Each	$60.00
Bronzed, to fasten on stone,	Each	68.00



A-729. HORSE DRINKING FOUNTAIN.

Our Horse Drinking Fountain with Plain Overflow is particularly adapted for use where constantly running water is desired.

Painted, to fasten on stone,	Each	$45.00
Bronzed, to fasten on stone,	Each	51.00

DIMENSIONS.—Height to top of trough, 1 foot 9 inches; length of trough, 3 feet 10 inches; width, 2 feet 1 inch; base, 40 x 18½ inches.

Horse Drinking Fountains A-727 and A-729 are provided with hand holes large enough to allow for making connections easily.

EDDY FIRE HYDRANTS.

IRON BODY, BRONZE MOUNTED. RUBBER-FACED VALVE.

TESTED TO 300 POUNDS WATER PRESSURE PER SQUARE INCH.

WORKING WATER PRESSURE 125 POUNDS.



A-730. EDDY STANDARD.

A-732 differs from the Standard Hydrant in having one or more Nozzles arranged with an Independent Cut-off so that additional Hose or Steamer Connections can be made without closing the main valve.

The Independent Cut-offs are of Bronze and for either Hose or Steamer Nozzles, as desired. See sectional view, page 34.

For directions in ordering Hydrants, see page 34.



A-732. WITH INDEPENDENT CUT-OFFS.

EDDY FIRE HYDRANTS.

(FROM PAVEMENT TO BOTTOM OF CONNECTING PIPE 5 FEET.)

SIZE OF HYDRANT - - - - - - - - - - - - - INCHES	3	4	4	4½	5	6	6	8
DIAMETER OF PIPE CONNECTION - - - - - - - INCHES	3 or 4	3 or 4	6	4 or 6	4 or 6	6	8	8 or 10
INSIDE DIAMETER OF STAND PIPE - - - - - - INCHES	4½	5½	5½	6	6⅝	7⅝	7⅝	9¾
WITH ONE 2½-INCH NOZZLE - - - - - - - - - EACH	28.00	31.00	31.50	----	----	----	----	----
WITH TWO 2½-INCH NOZZLES - - - - - - - - EACH	----	34.00	34.50	35.50	38.50	49.00	50.25	----
WITH THREE 2½-INCH NOZZLES - - - - - - - EACH	----	36.00	36.50	37.50	40.50	51.00	52.25	----
WITH FOUR 2½-INCH NOZZLES - - - - - - - - EACH	----	----	----	----	42.50	53.00	54.25	----
WITH SIX 2½-INCH NOZZLES - - - - - - - - - EACH	----	----	----	----	----	----	----	130.00
WITH ONE STEAMER NOZZLE 4-INCH - - - - - EACH	----	34.00	34.50	35.50	38.50	49.00	50.25	----
WITH ONE STEAMER AND ONE 2½-INCH NOZZLE EACH	----	36.00	36.50	37.50	40.50	51.00	52.25	----
WITH ONE STEAMER AND TWO 2½-INCH NOZZLES EACH	----	37.00	37.50	39.50	42.50	53.00	54.25	----
FROST CASE, STANDARD LENGTH - - - - - - - EACH	4.50	5.00	5.00	5.60	6.50	7.50	7.50	11.00
INDEPENDENT NOZZLE CUT-OFF GATE, 2½-INCH EACH	----	8.00	8.00	8.00	8.00	8.00	8.00	8.00

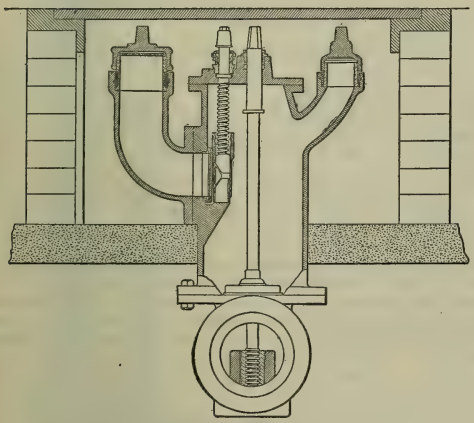
EDDY FIRE HYDRANTS OTHER THAN STANDARD LENGTH.

FOR EACH 6 INCHES MORE OR LESS IN LENGTH, ADD TO OR DEDUCT FROM STANDARD LIST.

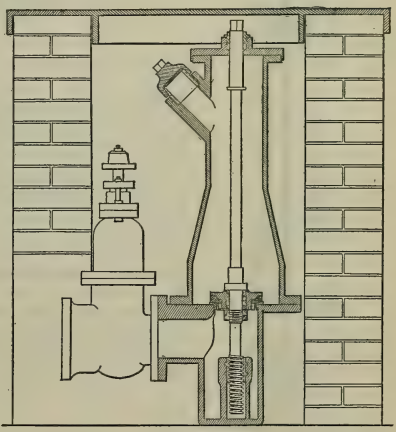
SIZE INLET - - - - - INCHES	3	3	4	4	4	4	6	6	6	6	8	8	10
STAND PIPE - - - - - - - -	.60	.75	.60	.75	.80	.85	.75	.80	.85	1.00	1.00	2.25	2.25
FROST CASE - - - - - - - -	.44	.50	.44	.50	.58	.70	.50	.58	.70	.90	.90	1.30	1.30

CLOW TROPICAL FLUSH HYDRANTS.

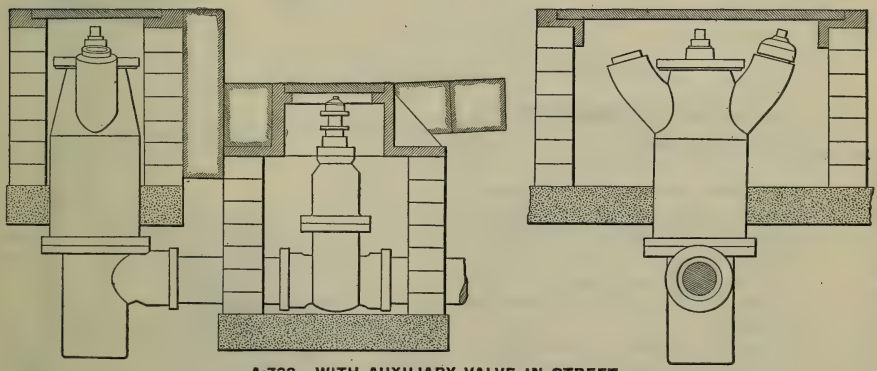
PATENTED.



A-736.
WITH ONE HOSE AND ONE STEAMER NOZZLE.



A-737.
WITH AUXILIARY VALVE ATTACHED TO HYDRANT.



A-738. WITH AUXILIARY VALVE IN STREET.

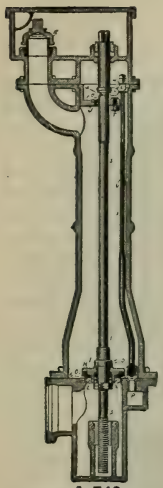
The Clow Tropical Flush Hydrants are constructed for use in warm climates or on water systems where pipes are drained during the winter. We make them with any size inlet, either threaded, flanged or hub ends, and with as many Nozzles, either Steamer or Hose, as may be required.

A-736 illustrates the Tropical Hydrant with one 4-inch Steamer Nozzle having Independent Cut-off and one 2½-inch Hose Nozzle.

A-737 shows Hydrant with Double Discharge and Auxiliary Valve attached to Hydrant.

A-738 illustrates the Double Discharge Hydrant having the Auxiliary Valve in the street.

Prices and detailed specifications will be furnished on application.



A-740.
FLUSH HYDRANT.

EDDY FLUSH HYDRANT.

TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 125 POUNDS.

SIZE OF INLET - - - - - - INCHES	3	4	4	4½	5	6	6	8
WITH ONE 2½-INCH NOZZLE - EACH	28.00	31.00	31.50	----	----	----	----	----
WITH TWO 2½-INCH NOZZLES - EACH	----	34.00	34 50	35.50	38.50	----	--	----
WITH THREE 2½-INCH NOZZLES EACH	----	....	36.50	37.50	40.50	----	----	----
WITH ONE STEAMER NOZZLE - EACH	----	34.00	34.50	35.50	38.50	49.00	----	----
FOR EACH 6-INCH MORE OR LESS THAN STANDARD LENGTH STAND PIPE ADD OR DEDUCT - - -	.60	.75	.75	.80	..85	1.00	----	----
DIAMETER OF PIPE CONNECTION - - - INCHES	3 or 4	3 or 4	6	4 or 6	4 or 6	6	8	8 or 10
INSIDE DIAMETER OF STAND PIPE - - - INCHES	4½	5½	5½	6	6⅝	7⅝	7⅝	9¾

These Hydrants have the advantage of being entirely below the surface, which greatly improves the appearance of a street and, in Railroad work, does not obstruct platforms.

The above prices are based on a standard length of five feet, measured from the ground surface to the bottom of the connecting pipe. The construction of the bottom and of the working parts of these Hydrants, and the method of operation, is exactly similar to the regular Eddy Fire Hydrant on page 30.

RAILROAD STAND PIPE AND METER.

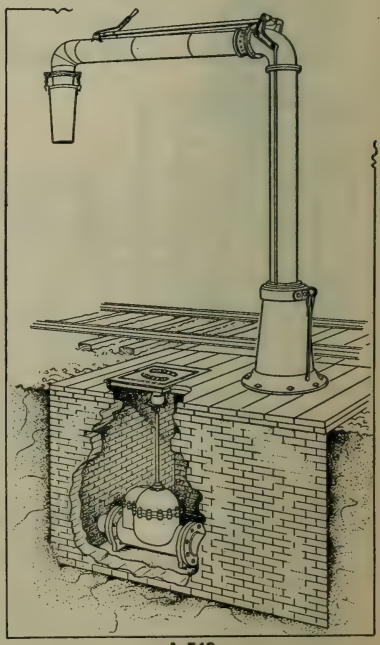
The Railroad Stand Pipe and Meter, as here shown, permits drawing water direct from the city or town main. Its advantages are evident to the practical man.

The Stand Pipe is simple and efficient, and there is no better meter for the purpose than the Hersey Torrent

For further information, see Hersey Torrent Meters, page 41, and Meter Boxes, page 26.

Correspondence solicited.

Prices upon application.



A-743.



A-745.
AUXILIARY VALVE.

EDDY FIRE HYDRANT WITH AUXILIARY VALVE AND BOX.

THE OBJECT OF THIS AUXILIARY VALVE is to provide means of shutting the water off from a Hydrant to permit access for repairs or for removal. Otherwise, it is intended to be left open at all times.

The Auxiliary Valve is Iron Bodied, Bronze Mounted, and made from either our 150 or 300 pounds test patterns.

An ordinary Valve Box is used in connection with it. For prices of these Boxes, see page 25.

The list prices of Auxiliary Valves are extra to the Hydrant prices. They include the cost of flanging the Hydrant bottom, and of the Valve bolted to it, but not the Valve Box.

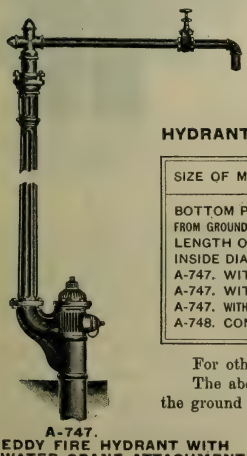
If Auxiliary Valves are shipped loose from the Hydrants (either for greater safety from damage in transit, or by request of customers ordering), then the necessary Gaskets and Bolts to make connections accompany the shipment.

FLANGED AND HUB AUXILIARY VALVE, BOLTED ON.—A-745.

SIZE OF VALVE . . . . . INCHES	3	4	5	6	8
AMERICAN, 150 POUNDS TEST . EACH	8.00	10.50	14.00	16.00	26.00
EDDY, 300 POUNDS TEST . . . EACH	10.00	12.00	17.00	20.50	30.00

EDDY SPRINKLING CART CRANES.

TESTED TO 300 POUNDS WATER PRESSURE PER SQUARE INCH.
WATER WORKING PRESSURE, 125 POUNDS.



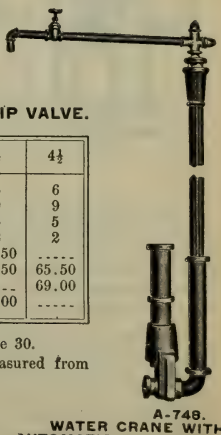
A-747.
EDDY FIRE HYDRANT WITH WATER CRANE ATTACHMENT.

HYDRANT WITH WATER CRANE, AND CRANE WITH DRIP VALVE.

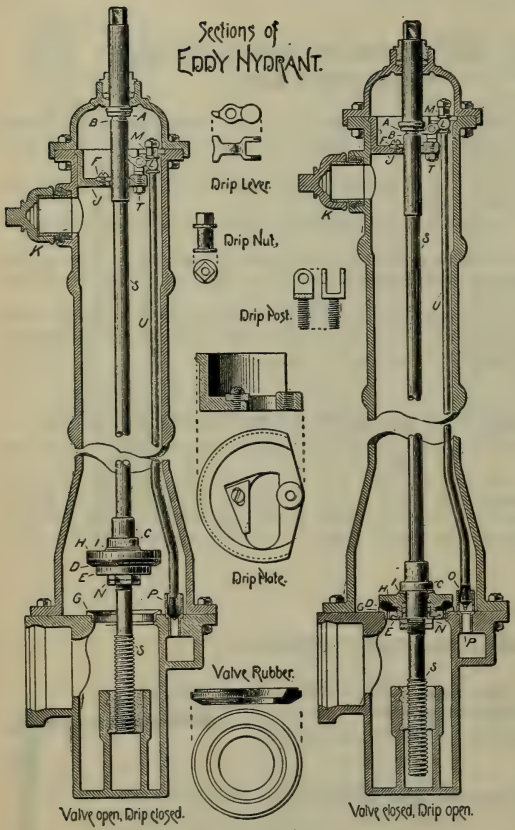
SIZE OF MAIN VALVE . . . . . INCHES	3	4	4	4½
BOTTOM PIPE CONNECTION . . . . . INCHES	3	4	6	6
FROM GROUND SURFACE TO UNDERSIDE OF SWINGING ARM, FEET	9	9	9	9
LENGTH OF SWINGING ARM . . . . . FEET	5	5	5	5
INSIDE DIAMETER OF SWINGING ARM . . INCHES	2	2	2	2
A-747. WITH ONE 2½-INCH NOZZLE . . . EACH	55.00	60.00	60.50	-----
A-747. WITH TWO 2½-INCH NOZZLES . . . EACH	-----	64.00	64.50	65.50
A-747. WITH ONE STEAMER AND TWO 2½-INCH NOZZLES, EACH	-----	-----	-----	69.00
A-748. COMPLETE WITH VALVE BOX . . . EACH	55.00	60.00	60.00	-----

For other combinations of Hose Nozzles, see Hydrant List, page 30.

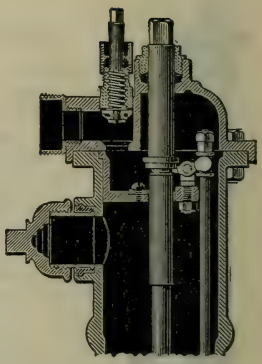
The above prices are based on a standard length of five feet, measured from the ground surface to the bottom of the connecting pipe.



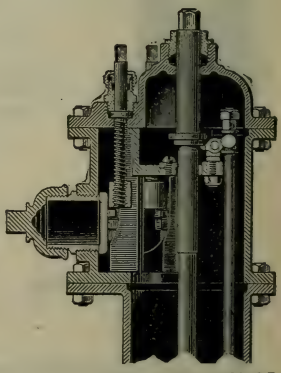
A-748.
WATER CRANE WITH AUTOMATIC DRIP VALVE.



A-750. SECTIONAL.



A-751.



A-752. SECTIONAL OF INDEPENDENT CUT-OFF.

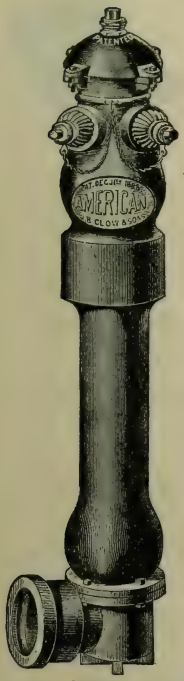
THE EDDY FIRE HYDRANT.

When ordering Hydrants give following details: Size and form of Nut to open Hydrant; number and size of Nozzles; length from pavement to bottom of connection; size of connection to main, and whether it is desired to open Hydrants by turning to the right or left. In sending gauge for Hydrants we always prefer a Hydrant Cap, as this should give both thread of Nozzle and size and style of Nut. We carry constantly in stock, and term our standard pattern Hydrant, Five-foot Double Discharge, 2½-inch Nozzles, 4-inch hub inlet Hydrants, Pentagon Nut, ¾-inch sides, made to open turning to the left, and Chicago Standard Hose Thread. We recommend this pattern to all new companies.

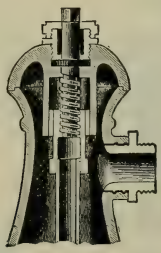
A-751 represents an Eddy Hydrant with special top used for filling sprinkling carts. This Valve is formed in the Hydrant cover so that it can be removed with the cover in the winter time and a regular cover substituted. By the use of this device the Hydrant can be left open during the summer for sprinkling purposes, and the small valve in the top of the cover used to let out and shut off the water. This reduces the wear on the main valve, as hydrants used for filling sprinkling carts are opened and closed many thousand times a year. When the season for sprinkling is over, the cap can be removed and put in repair for the next season's use.

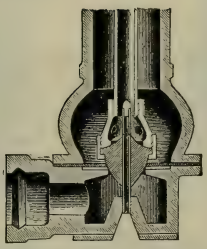
AMERICAN FIRE HYDRANTS.

BRASS MOUNTED, RUBBER VALVE, AND POSITIVE WASTE.



A-755.
AMERICAN STANDARD
FIRE HYDRANT.





A-755. SECTIONAL.



A-757.
AMERICAN CORPORATION
HYDRANT.

AMERICAN STANDARD FIRE HYDRANTS.—A-755.

Diameter of Inlet Pipe, Inches.	Pavement to Bottom of Connecting Pipe.	One 2½-inch Hose Nozzle.	Two 2½-inch Hose Nozzles.	Three 2½-inch Hose Nozzles.	One Steamer Nozzle.	One Steamer and One 2½-inch Nozzle.	One Steamer and Two 2½-inch Nozzles.	Frost Case, Standard Length.	Each Foot in Length of Stand Pipe, extra.	Each Foot in Length of Frost Case, extra.
3	5	27.50	29.50	31.50	29.00	31.50	33.50	3.00	1.20	.50
4	5	32.00	34.00	36.00	34.00	36.00	38.00	5.00	1.50	1.00
5	5	38.00	40.00	42.00	40.00	42.00	44.00	5.00	1.75	1.00
6	5	47.00	49.00	51.00	49.00	51.00	53.00	6.00	2.25	1.25

For directions in ordering Hydrants, see bottom of page 34.

AMERICAN CORPORATION HYDRANT.—A-757.—Inlet Threaded for Iron Pipe.

TO SET IN GROUND . . . . . FEET	1½	2	3	4	5	6	8	10
1¼-INCH INLET AND OUTLET . . . . EACH	11.85	12.00	12.30	12.65	13.00	13.50	15.00	17.00
1½-INCH INLET AND OUTLET . . . . EACH	16.30	16.45	16.80	17.15	17.50	18.00	19.50	22.00
2-INCH INLET AND OUTLET . . . . . EACH	22.25	22.50	23.00	23.50	24.00	24.75	27.00	30.00

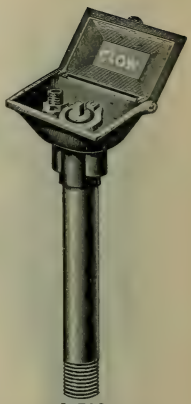


A-759.
CLOW PARK HYDRANT.

CLOW HYDRANTS AND STREET WASHERS.

The valve and operating mechanism of the Clow Park Hydrants and Street Washers are placed in the top section and are intended for non-freezing climates, or where the system is drained during the winter.

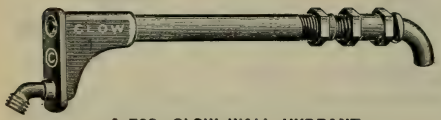
TO SET IN GROUND 18 INCHES.



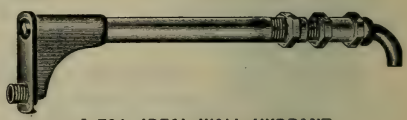
A-760.
CLOW PARK STREET WASHER.

CLOW PARK HYDRANTS AND STREET WASHERS.—A-759 and A-760.

SIZE, OUTLET AND INLET PIPE - - INCHES	¾	1	1¼	1½	2
A-759 - - - - - - - - - - - - - - - EACH	5.00	5.50	6.50	9.00	12.00
A-760 - - - - - - - - - - - - - - - EACH	3.50	4.00	5.00	7.50	10.00



A-763. CLOW WALL HYDRANT.



A-764. IDEAL WALL HYDRANT.

WALL HYDRANTS.—A-763 and A-764.

THICKNESS OF WALL - - - - - - - - - - - - - - - INCHES	9	13	18	20	24
A-763. ¾-INCH INLET AND OUTLET - - - - - - - - - - EACH	6.00	7.00	8.00	8.50	9.00
A-763. 1-INCH INLET AND OUTLET - - - - - - - - - - EACH	12.00	14.00	16.00	17.00	18.00
A-764. ¾-INCH INLET AND OUTLET - - - - - - - - - - EACH	3.50	4.00	4.50	4.75	5.00
A-764. 1-INCH INLET AND OUTLET - - - - - - - - - - EACH	7.00	8.00	9.00	9.50	10.00
IF WITH NICKEL-PLATED FACE, ADD - - - - - - - - - EACH	.75	.75	.75	.75	.75

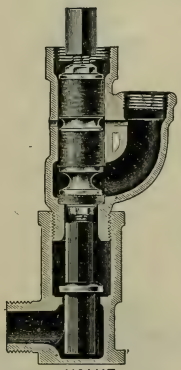
These Hydrants are designed to be placed horizontally in the wall of a building, thereby offering no obstruction to a yard or lawn. They can be repaired without taking out the wall. The face plate and nozzle of the Clow Hydrant, A-763, are made of Bronze to prevent the possibility of staining stone by corrosion. The operating rod is also of Bronze, and the construction of the entire Hydrant is substantial and neat.

The Ideal is for lighter service and has face plate of Brass.

CLOW HYDRANTS AND STREET WASHERS.



A-766.
CLOW AUTOMATIC HYDRANT.



VALVE,
SECTIONAL VIEW.



A-767.
CLOW AUTOMATIC STREET WASHER.



A-770.
SELF-CLOSING HYDRANT.

The automatic feature of these Hydrants and Street Washers is our Check Valve, which closes with the pressure, thereby stopping flow from street main when repairs are necessary. This obviates digging up, as with other styles, and no Stop Cock is required.

CLOW AUTOMATIC HYDRANTS.—A-766.

TO SET IN GROUND . . . . . FEET	1½	2	2½	3	3½	4	5	6	7	8
OPENING ¾-INCH . . . . . EACH	7.00	7.15	7.20	7.25	7.35	7.50	7.75	8.00	8.25	8.50
OPENING 1-INCH . . . . . EACH	9.50	9.60	9.70	9.75	9.90	10.00	10.25	10.50	10.75	11.00

CLOW AUTOMATIC STREET WASHERS.—A-767.

TO SET IN GROUND . . . . . FEET	2	3	3⅛	4	4½	5	6	8
OPENING ¾-INCH . . . . . EACH	3.50	3.90	4.10	4.30	4.50	4.70	5.25	6.25
OPENING 1-INCH . . . . . EACH	5.50	6.00	6.25	6.50	6.75	7.00	7.50	8.50

CLOW SELF-CLOSING HYDRANTS.—A-770.

TO SET IN GROUND . . . . . FEET	1½	2	2½	3	4	5	6	8
OPENING ¾-INCH . . . . . EACH	10.80	11.10	11.35	11.60	12.00	12.50	13.10	14.50
OPENING 1-INCH . . . . . EACH	13.70	14.50	14.90	15.30	15.75	16.30	17.00	19.50



A-773.
HEAVY PATTERN No. 1.



A-774.
LIGHT PATTERN No. 2.



A-775.
PATTERN No. 5.

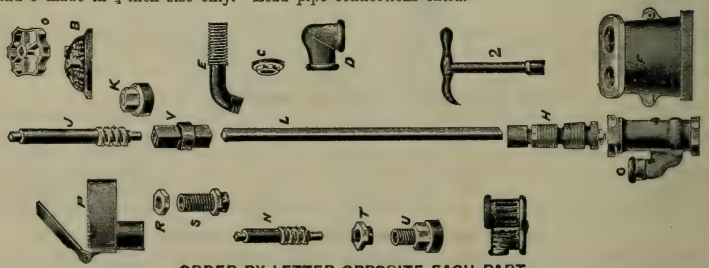


A-776.
STREET WASHER No. 3.

HYDRANTS AND STREET WASHERS, McNAMARA PATTERN.

TO SET IN GROUND . . . . . FEET	2	2½	3	3½	4	4½	5	6	8
NO. 1 OPENING, ¾-INCH . . . . EACH	5.00	5.20	5.40	5.60	5.80	6.00	6.30	6.90	7.75
NO. 2 OPENING, ¾-INCH . . . . EACH	3.50	3.70	3.90	4.10	4.30	4.50	4.70	5.25	6.25
NO. 2 OPENING, 1-INCH . . . . EACH	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.50	8.50
NO. 5 OPENING, ¾-INCH . . . . EACH	4.00	4.20	4.40	4.60	4.80	5.00	5.25	5.75	6.75
NO. 3 OPENING, ¾-INCH . . . . EACH	3.50	----	3.90	4.10	4.30	4.50	4.70	5.25	6.25
NO. 3 OPENING, 1-INCH . . . . EACH	5.50	----	6.00	6.25	6.50	6.75	7.00	7.50	8.50

Nos. 1 and 5 made in ¾-inch size only. Lead pipe connections extra.



ORDER BY LETTER OPPOSITE EACH PART.

PART	B	C	D	E	F	G	H	I	J	K	L	N	O	P	R	S	T	U	V	2
EACH	.25	.15	.15	.25	.20	1.00	.50	.40	.30	.35	.10	.30	.10	.50	.15	.25	.25	.35	.30	.10



PARTS OF AMERICAN HYDRANTS AND STREET WASHERS.

FIGURE	A-780	A-781	A-782	A-783	A-784	A-785	A-786	A-787	A-788
¾-INCH EACH	1.75	1.00	.30	.40	.60	.40	.20	.40	.80
1-INCH EACH	2.00	1.25	.40	.40	.70	.50	.20	.50	.90

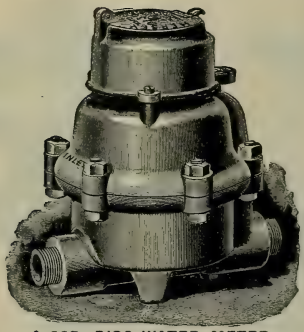
FIGURE	A-789	A-790	A-791	A-792	A-793	A-794	A-795	A-796	----
¾-INCH EACH	1.00	.20	.50	.20	.70	.70	.30	.60	----
1-INCH EACH	1.20	.20	.50	.25	.80	.80	.40	.80	----



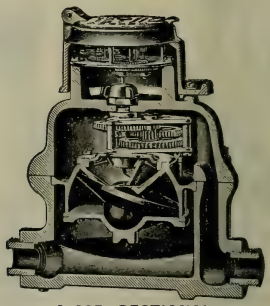
PARTS OF IDEAL HYDRANTS AND STREET WASHERS.

FIGURE	A-800	A-801	A-802	A-803	A-804	A-805	A-806	A-807	A-808	A-809	A-810
¾-INCH EACH	1.50	.50	.30	.30	.80	.60	.40	.40	.20	.25	.06
1-INCH EACH	1.75	.75	.40	.40	1.00	.70	.50	.50	.20	.35	.06

FIGURE	A-811	A-812	A-813	A-814	A-815	A-816	A-817	A-818	A-819	A-820	A-821
¾-INCH EACH	.10	.20	.80	.70	.50	.70	.70	.30	.20	.60	.70
1-INCH EACH	.10	.20	1.00	1.00	.50	.80	.80	.40	.20	.75	.90



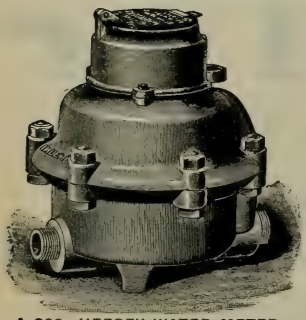
A-825. DISC WATER METER.



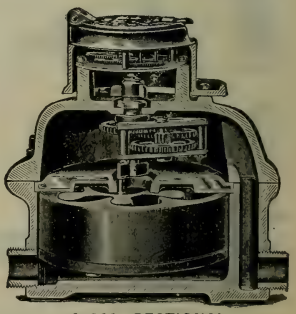
A-825. SECTIONAL.

HERSEY DISC WATER METERS.—A-825.

SIZE — INCHES	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6
METERS — EACH	8.00	12.00	16.00	30.00	50.00	90.00	175.00	375.00
CONNECTIONS — PER METER	.40	.60	.80	No Charge	No Charge	No Charge	No Charge	No Charge
GREATEST PROPER QUANTITY PER MIN. — CUBIC FEET	2	4	8	12	20	36	72	120
GREATEST PROPER QUANTITY PER MIN. — GALLONS	15	30	60	90	150	270	540	900
NET WEIGHT OF METER — POUNDS	13	18	28	47	77	253	426	810
DIAMETER OF METER — INCHES	6	7	$8\frac{1}{4}$	$10\frac{3}{8}$	$12\frac{1}{8}$	$18\frac{1}{8}$	22	$27\frac{5}{8}$
LENGTH OF METER — INCHES	$7\frac{3}{8}$	9	$10\frac{7}{8}$	$12\frac{5}{8}$	$15\frac{1}{4}$	24	29	$36\frac{1}{2}$



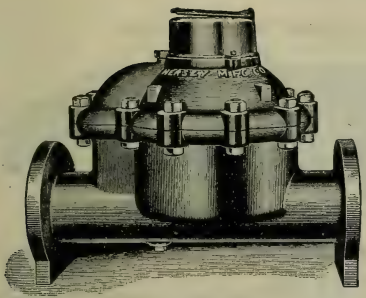
A-826. HERSEY WATER METER.



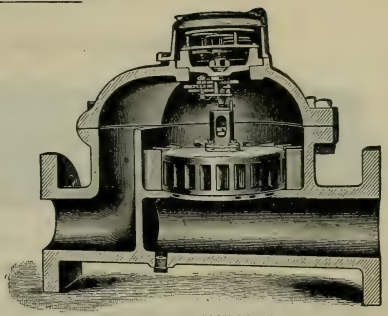
A-826. SECTIONAL.

HERSEY ROTARY WATER METERS.—A-826.

SIZE — INCHES	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6
METERS — EACH	12.00	21.00	30.00	50.00	65.00	135.00	250.00	500.00
CONNECTIONS — PER METER	.40	.60	.80	No Charge	No Charge	No Charge	No Charge	No Charge
GREATEST PROPER QUANTITY PER MIN. — CUBIC FEET	2	4	8	12	20	36	72	120
GREATEST PROPER QUANTITY PER MIN. — GALLONS	15	30	60	90	150	270	540	900
NET WEIGHT OF METER — POUNDS	16	27	43	73	112	265	446	854
DIAMETER OF METER — INCHES	7	$8\frac{1}{4}$	$10\frac{3}{8}$	$12\frac{1}{8}$	$13\frac{1}{2}$	$18\frac{1}{8}$	22	$27\frac{5}{8}$
LENGTH OF METER — INCHES	$7\frac{3}{8}$	9	$11\frac{3}{8}$	$12\frac{5}{8}$	$15\frac{1}{4}$	24	29	$36\frac{1}{2}$



A-827. HERSEY TORRENT WATER METER.



A-827. SECTIONAL.

HERSEY TORRENT WATER METERS.—A-827.

SIZE — INCHES	2	3	4	6	8	10	12
METERS — EACH	40.00	80.00	160.00	350.00	650.00	800.00	1200.00
CONNECTIONS — PER METER	No Charge	No Charge	No Charge	No Charge	No Charge	No Charge	No Charge
GREATEST PROPER QUANTITY PER MIN. — CUBIC FEET	32	72	128	288	512	800	1152
GREATEST PROPER QUANTITY PER MIN. — GALLONS	240	540	960	2160	3840	6000	8640
NET WEIGHT OF METER — POUNDS	47	108	189	355	533	870	1200
DIAMETER OF METER — INCHES	8⅜	11	13½	17	20	24½	30
LENGTH OF METER (INCLUDING FISH TRAP) — INCHES	15¼	24	29	36½	45	52	61

All sizes of Hersey Torrent Meters are provided with Fish Traps without extra charge. These Traps are attached to and form a part of the Meter.

Prices on all Hersey Disc, Rotary and Torrent Meters are for either regular Round Dials or Straight Reading, as specified. Round Dials will be furnished unless otherwise ordered.

EXTENSION DIALS. (For Illustration, see Meter Boxes, page 26.)

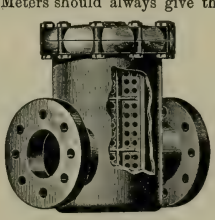
SIZE — INCHES	⅝	¾	1	1½	2	3	4	6	8	10	12
PRICE — EACH	1.50	1.50	1.50	1.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Extensions over three feet in length, 25 cents per foot above list prices. Prices given above include boxing or crating.

Those who have occasion to order parts of Meters should always give the KIND, SIZE and NUMBER of the Meter for which the parts are wanted.



A-830. SIMPLEX STRAINER.



A-831. POT STRAINER.



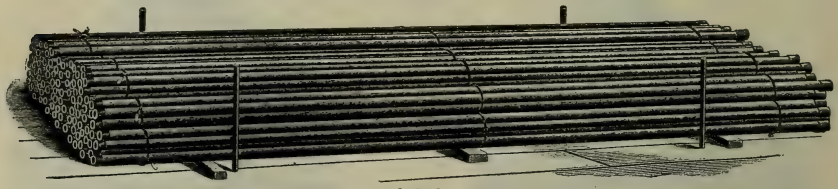
A-832. CROSSWAY STRAINER.

FISH TRAPS OR METER STRAINERS.—A-830, A-831, and A-832.

SIZE — INCHES	⅝	¾	1	1½	2	3	4	6	8	10	12
A-830 — EACH	.50	.75	1.00	----	----	----	----	----	----	----	----
A-831 AND A-832 — EACH	2.00	2.00	4.00	6.00	6.00	10.00	15.00	20.00	40.00	150.00	150.00

The SIMPLEX is made of composition metal and consists of two pieces, a cylindrical shell and a removable, perforated Cylinder. The CROSSWAY is of Cast Iron, Galvanized, with perforated brass screen. It does not have to be uncoupled from Meter or Pipe to be cleaned. The POT STRAINER is of Cast Iron, Galvanized, and provided with flanges to correspond with flanges of Meter. These can be furnished with Flange on Meter End and Hub on Pipe End. The Perforated Strainer can be removed and access had to interior, for cleaning, by removing Cover bolted to Top.

STANDARD PIPE FOR GAS, STEAM, AND WATER.



A-840

LIST PRICE ADOPTED FEBRUARY 15, 1900

BLACK AND GALVANIZED PIPE.

SIZE - - - - - - - - - - - - - - - INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PRICE - - - - - - - - - - - - - PER FOOT	.05½	.05½	.05½	.08½	.11½	.16½	.22½	.27	.36	.57½	.75½
SIZE - - - - - - - - - - - - - - - INCHES	3½	4	4½	5	6	7	8	9	10	11	12
PRICE - - - - - - - - - - - - - PER FOOT	.95	1.08	1.30	1.45	1.88	2.35	2.82	3.40	4.25	4.75	5.20

ASPHALTED AND TARRED PIPE.

SIZE - - - - - - - - - - - - - - - INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PRICE, COATING ONLY - - - PER 100 FEET	----	----	.40	.40	.45	.50	.60	.75	.95	1.20	1.45
SIZE - - - - - - - - - - - - - - - INCHES	3½	4	4½	5	6	7	8	9	10	11	12
PRICE, COATING ONLY - - - PER 100 FEET	1.75	1.75	1.85	2.00	2.40	3.00	4.00	----	----	----	----

EXTRA THREADS.

SIZE - - - - - - - - - - - - - - - INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PRICE - - - - - - - - - - - - - - EACH	.05	.05	.05	.05	.05	.06	.07	.08	.10	.15	.20
SIZE - - - - - - - - - - - - - - - INCHES	3½	4	4½	5	6	7	8	9	10	11	12
PRICE - - - - - - - - - - - - - - EACH	.25	.35	.45	.55	.70	.85	1.00	1.25	1.50	2.00	2.50

DIMENSIONS AND WEIGHTS.

NOMINAL SIZE INSIDE DIAMETER - - INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
ACTUAL OUTSIDE DIAMETER - - - INCHES	.405	.54	.675	.84	1.05	1.315	1.66	1.9	2.375	2.875	3.5
NOMINAL WEIGHT PER FOOT - - - POUNDS	0.24	0.42	0.56	0.84	1.12	1.67	2.24	2.68	3.61	5.74	7.54
THICKNESS - - - - - - - INCHES	.068	.088	.091	.109	.113	.134	.140	.145	.154	.204	.217
THREADS PER INCH OF SCREW -	27	18	18	14	14	11½	11½	11½	11½	8	8

NOMINAL SIZE INSIDE DIAMETER - - INCHES	3½	4	4½	5	6	7	8	9	10	11	12
ACTUAL OUTSIDE DIAMETER - - - INCHES	4.	4.5	5.	5.563	6.625	7.625	8.625	9.625	10.75	12.	12.75
NOMINAL WEIGHT PER FOOT - - - POUNDS	9.00	10.66	12.49	14.50	18.76	23.27	28.18	33.70	40.00	45.00	49.00
THICKNESS - - - - - - - INCHES	.226	.237	.246	.259	.280	.301	.322	.344	.366	.375	.375
THREADS PER INCH OF SCREW -	8	8	8	8	8	8	8	8	8	8	8

Owing to the frequent changes made by the manufacturers in the price list of Pipe, we issue current price lists, which will be furnished on application.

Black Pipe in random lengths, with threads and couplings, will be shipped unless otherwise ordered. An extra charge will be made for cut lengths, or for plugged and reamed Pipe.

STANDARD PIPE, EXTRA STRONG.

SIZE . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
BLACK . . PER FOOT	.11	.11	.11	.12	15	22	30	.36	50	.81	1.05	1.33	1.50	2 16	2 90
ACTUAL OUTSIDE DIA. INCH.	.405	.54	.675	.84	1.05	1.315	1 66	1.90	2.375	2.875	3.50	4.00	4 50	5 563	6 625
APPROX. INSIDE DIA. INCH.	.205	.294	.421	.542	.736	.951	1.272	1.494	1.933	2.315	2.892	3.358	3.818	4 813	5.75
THICKNESS . . INCHES	.100	.123	.127	.149	.157	.182	.194	203	.221	.280	.304	.321	341	.375	.437
NOMINAL WEIGHT PER FOOT	.29	.54	.74	1.09	1.39	2.17	3.00	3.63	5.02	7.67	10.25	12.47	14.97	20 54	28 58

STANDARD PIPE, DOUBLE EXTRA STRONG.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
BLACK . . . . . PER FOOT	.25	.30	.37	.52	65	.95	1.37	1.92	2.45	2.85	3.80	5.30
ACTUAL OUTSIDE DIAMETER . INCHES	.84	1.05	1.315	1.66	1.90	2.375	2.875	3.50	4.00	4.50	5.563	6.625
APPROX. INSIDE DIAMETER . INCHES	.244	.422	.587	.885	1.088	1.491	1.755	2.284	2.716	3.136	4.063	4.875
THICKNESS . . . . . INCHES	.298	.314	.364	.388	406	.442	.560	.608	.642	.682	.75	.875
NOMINAL WEIGHT . . . . PER FOOT	1.70	2.44	3.65	5.20	6.40	9.02	13.68	18.56	22.75	27.48	38.12	53.11

Extra Strong and Double Extra Strong Pipe is always shipped without threads or couplings, unless otherwise specified. Threads and couplings on Extra Strong and Double Extra Strong Pipe are always charged extra. Quotations will not cover them unless they are clearly specified in requests for prices.

LARGE OUTSIDE DIAMETER PIPE. (List of May 1, 1902.)

PLAIN ENDS.

SIZE . . . . . INCHES	14	15	16	17	18	20	21	22	24	26	28	30
¼-INCH THICK . . . . . PER FOOT	3.85	4.15	4.40	4.70	4.95	5.50	....	....	....	.....	.....	.....
5/16-INCH THICK . . . . . PER FOOT	4.80	5.15	5.50	5.85	6.20	6.90	7.25	7.60	....	.....	.....	.....
⅜-INCH THICK . . . . . PER FOOT	5.75	6.15	6.60	7.00	7.40	8.25	8.65	9.10	9.95	11.30	12.15	.....
7/16-INCH THICK . . . . PER FOOT	6.65	7.15	7.65	8.15	8.60	9.60	10.10	10.60	11.60	13.15	14.15	15.20
½-INCH THICK . . . . . PER FOOT	7.60	8.15	8.70	9.25	9.80	10.95	11.50	12.10	13.15	14.95	16.15	17.65

This Pipe will be shipped in random lengths, with plain ends, unless otherwise ordered.
When furnished in cut lengths, or threaded, an extra charge will be made.
Threaded Pipe can be furnished up to 22 inches; with threads and couplings, up to 20 inches.

STANDARD STEEL BOILER TUBES.

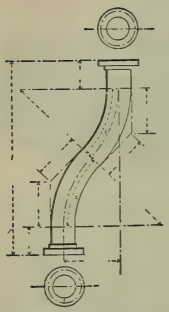
OUTSIDE DIAMETER . . INCHES	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4
PER FOOT	.30	.28	.27	.22	.20	.24	.28	.34	.35	.40	.44	.50	.55
THICKNESS . . . . . INCHES	.095	.095	.095	.095	.095	.095	.109	.109	.109	.120	.120	.120	.134
THICKNESS, NEAREST BGM. W. G. .	13	13	13	13	13	13	12	12	12	11	11	11	10
NOMINAL WEIGHT . PER FOOT	.90	1.15	1.40	1.66	1.91	2.16	2.75	3.04	3.33	3.96	4.28	4.60	5.47
OUTSIDE DIAMETER . . INCHES	4½	5	6	7	8	9	10	11	12	13	14	15	16
PER FOOT	.62	.75	1.00	1.20	1.50	1.70	2.10	2.50	2.90	3.20	3.65	4.10	4.60
THICKNESS . . . . . INCHES	.134	.148	.165	.165	.165	.180	.203	.220	.229	.238	.248	.259	.270
THICKNESS, NEAREST BGM. W. G. .	10	9	8	8	8	7	6	5	4½	4	3½	3	2½
NOMINAL WEIGHT . PER FOOT	6.17	7.58	10.16	11.90	13.65	16.76	21.00	25.00	28.50	32.06	36.00	40.60	45.20

The above prices are for tubes up to 20 feet long. For tubes in excess of that length, 10 per cent will be added to net of invoice. No deduction for tubes lighter than standard.

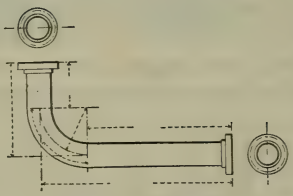
For extra wire gauge boiler tubes, away from standard not exceeding four wire gauges, one cent for each inch in diameter of tube for each additional gauge will be added to net price.

Tubes more than four wire gauges heavier than standard will be charged by the pound the same as plain end stay tubes, arch pipes, and water grates.

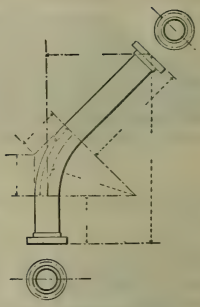
BENT PIPE.



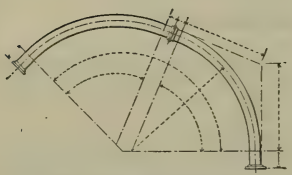
A-850. OFFSET BEND.



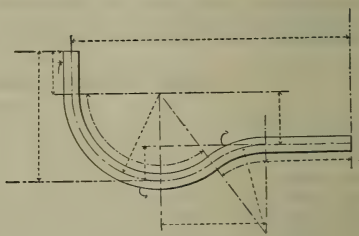
A-851. RIGHT BEND.



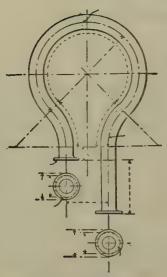
A-852. OBTUSE BEND.



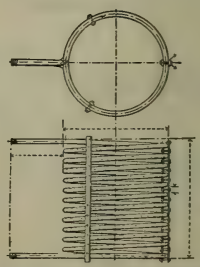
A-855. ARC BEND.



A-856. SPECIAL.



A-858. SPECIAL.



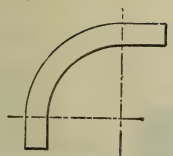
A-860. EXTRA STRONG PIPE COIL.

We bend all sizes of Iron, Steel, Brass, or Copper Pipe to any practical shape, and fit same with Threaded, Shrunk, Peened, or Riveted Flanges. Bent Pipe lessens friction and saves joints.

In ordering, give explicit directions and dimensions, the latter to be shown in sketch or blue print, as indicated in above illustrations.

Correspondence solicited. Prices upon application.

BENT PIPE.



A-862. QUARTER BENDS.



A-863. RETURN BENDS.

SHORT RADIUS QUARTER AND RETURN BENDS.—A-862 and A-863.

SIZE ..... INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
STRAIGHT PIPE REQUIRED, INCHES	3/4	1	1 1/4	1 1/2	1 3/4	2 1/4	2 1/2	2 3/4	3	3 1/2	4	4 1/2	5	5 1/2	6
RADIUS ..... INCHES	1	1 1/4	1 1/2	1 3/4	2	2 1/2	2 3/4	3 1/4	4 1/2	6	7	9	12	15	18
A-862. LENGTH OF ARC, INCHES	1 5/16	1 13/16	2 1/16	2 3/8	3 1/8	3 15/16	4 5/16	5 5/8	7 1/16	9 13/16	11	14 1/8	18 7/16	23 9/16	28 3/16
A-863. LENGTH OF ARC, INCHES	3 1/8	3 1/16	4 1/16	5 1/2	6 1/4	7 1/16	8 5/8	10 1/4	14 1/8	18 13/16	22	28 1/4	37 1/16	47 1/8	56 9/16

SIZE ..... INCHES	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24
STRAIGHT PIPE REQUIRED, INCHES	6 1/2	7	8	10	12	12	14	16	18	20	22	24	24	24	24
RADIUS ..... FT., IN.	2	2.6	3.2	3.10	4.4	5.0	6.6	7.0	7.6	8.0	8.6	9.6	10.6	11.6	12.6
A-862. LENGTH OF ARC, FT., IN.	3.11 1/16	3.11 1/16	4.11 3/16	6.0 1/4	6.9 3/16	7.10 1/16	10.2 1/4	11.0	11.9 1/16	12.6 1/16	13.4 5/16	14.11 1/16	16.5 3/16	18.0 3/16	19.7 5/16
A-863. LENGTH OF ARC, FT., IN.	6.3 3/8	7.10 1/2	9.11 5/16	12.0 1/2	13.7 5/16	15.8 1/2	20.5	22.0	23.6 1/16	25.1 1/16	26.8 7/16	29.10 1/8	32.11 1/16	36.1 9/16	39.3 1/4

Short Radius Return Bends 12-inch and over can not be made in one piece.

LONG RADIUS QUARTER AND RETURN BENDS.—A-862 and A-863.

SIZE ..... INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
STRAIGHT PIPE REQUIRED, INCHES	3/4	1	1 1/4	1 1/2	1 3/4	2 1/4	2 1/2	2 3/4	3	3 1/2	4	4 1/2	5	5 1/2	6
RADIUS ..... INCHES	3	3 1/2	4	5	6	7	8	10	12	14	18	20	24	26	30
A-862. LENGTH OF ARC, INCHES	4 3/16	5 1/2	6 3/16	7 13/16	9 7/16	11	12 9/16	15 1/16	18 7/16	22	28 9/16	31 13/16	37 1/16	40 7/16	47 1/8
A-863. LENGTH OF ARC, INCHES	9 7/16	11	12 9/16	15 11/16	18 7/8	22	25 1/8	31 3/16	37 1/16	44	56 1/16	62 1/16	75 3/16	81 1/16	94 1/4

SIZE ..... INCHES	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24
STRAIGHT PIPE REQUIRED, INCHES	6 1/2	7	8	10	12	13	14	18	18	20	22	24	24	24	24
RADIUS ..... FT., IN.	3.0	4.0	4.6	5.0	5.6	6.0	7.6	7.6	8.0	8.6	10.0	12.0	14.0	16.0	18.0
A-862. LENGTH OF ARC, FT., IN.	4.8 1/32	6.3 3/32	7.0 1/16	7.10 1/4	8.7 1/16	9.5 3/32	11.9 3/8	11.9 3/8	12.6 1/16	13.4 3/32	15.8 1/32	18.10 3/16	21.11 1/32	25.1 1/32	28.3 3/32
A-863. LENGTH OF ARC, FT., IN.	9.5 3/32	12.6 1/16	14.1 3/8	15.8 1/2	17.3 3/8	18.10 3/16	23.6 1/2	23.6 1/2	25.1 1/32	26.8 7/16	31.5	37.8 3/8	43.11 1/2	50.3 3/16	56.6 9/16

Long Radius Quarter Bends 20-inch and over, and L. R. Return Bends 12-inch and over, can not be made in one piece.



A-865. LOOP.



A-866. U BENDS.



A-867. SQUARE BEND.

LOOP EXPANSION BENDS.—A-865.

SIZE ..... INCHES	2	3	4	5	6	7
R ..... INCHES	18	21	24	30	33	33
L ..... INCHES	24	32	40	44	48	54
WEIGHT ..... POUNDS	42	102	170	282	400	500

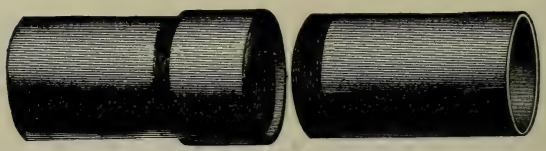
U AND SQUARE EXPANSION BENDS.—A-866 and A-867.

SIZE ..... INCHES	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8
A-866. R ..... INCHES	21	22 1/2	24	26	28	31	34	38	42	44
A-866. Y ..... INCHES	15	16 1/2	18	19	20	23	26	28	30	32
A-866. L ..... FEET AND INCHES	6.6	7.1	7.8	8.3	8.10	9.11	11.0	12.1	13.2	13.4
A-866. WEIGHT ..... POUNDS	36	62	88	113	143	186	242	345	465	598
A-867. R ..... INCHES	12	14	15	17	18	20	24	30	33	36
A-867. L ..... INCHES	15	17 1/2	19	21 1/2	23	25 1/2	30	36 1/2	40	44
A-867. WEIGHT ..... POUNDS	7	14	20	27	33	44	60	93	127	169

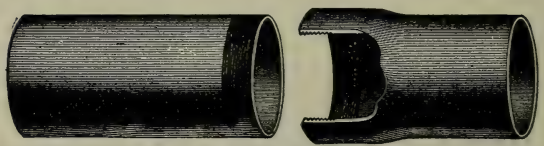
Allowable compression on Loop and U Bends is 6 inches.

STANDARD WELL CASING.

FOR ARTESIAN, SALT, OIL, AND GAS WELLS.



A-870. SCREW AND SOCKET JOINT.

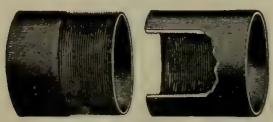


A-871. INSERTED JOINT.

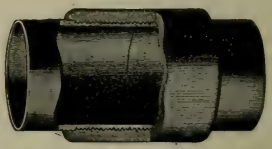
NOMINAL INSIDE DIAMETER	INCHES	2	2 1/2	2 1/2	2 3/4	3	3 1/2	3 1/2	3 3/4	4	4 1/2	4 1/2	4 3/4	5
ACTUAL OUTSIDE DIAMETER	INCHES	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4	4 3/4	4 3/4	5	5 1/4
ACTUAL OUTSIDE DIAMETER BELL END OF INSERTED CASING	INCHES	2 3/8	2 11/32	2 11/32	3 1/8	3 7/16	3 11/16	3 15/16	4 3/16	4 7/16	4 11/16	4 11/16	5 1/4	5 7/16
ACTUAL OUTSIDE DIAMETER OF SOCKET ON SCREW AND SOCKET CASING	INCHES	2 11/32	3 1/32	3 11/32	3 15/32	3 7/8	4 3/32	4 13/32	4 13/32	4 13/32	5 3/32	5 3/8	5 11/32	5 17/32
THICKNESS	INCHES	.109	.109	.109	.109	.12	.12	.12	.134	.134	.134	.148	.148	.148
NOMINAL WEIGHT PER FOOT	POUNDS	2.22	2.82	3.13	3.45	4.10	4.45	4.78	5.56	6.00	6.36	6.73	7.80	8.20
PRICE PER FOOT		.23	.29	.32	.35	.41	.45	.48	.56	.60	.64	.68	.78	.82

NOMINAL INSIDE DIAMETER	INCHES	5 3/16	5 5/8	6 1/4	6 5/8	7 1/4	7 5/8	8 1/4	8 5/8	9 5/8	10 5/8	11 5/8	12 1/2	---
ACTUAL OUTSIDE DIAMETER	INCHES	5 1/2	6	6 5/8	7	7 5/8	8	8 5/8	9	10	11	12	13	---
ACTUAL OUTSIDE DIAMETER BELL END OF INSERTED CASING	INCHES	5 3/4	6 1/4	6 7/8	7 5/16	7 31/32	8 11/32	9	9 5/8	10 5/8	11 5/8	12 5/8	---	---
ACTUAL OUTSIDE DIAMETER OF SOCKET ON SCREW AND SOCKET CASING	INCHES	6 5/16	6 13/32	7 3/16	7 13/32	8 7/32	8 5/8	9 5/16	9 13/16	10 13/16	---	12 3/16	---	---
THICKNESS	INCHES	.156	.156	.165	.165	.165	.172	.180	.180	.191	.211	.229	.25	---
NOMINAL WEIGHT PER FOOT	POUNDS	8.62	10.46	11.58	12.34	13.55	15.41	16.07	17.60	21.90	26.72	30.35	33.78	---
PRICE PER FOOT		.87	1.05	1.16	1.24	1.36	1.55	1.61	1.76	2.20	2.68	3.05	3.38	---

Unless otherwise ordered, Screw and Socket Joint Casing will be sent, and size given in order will be considered as inside diameter required. Special and Heavy Casing with Screw and Socket, or with Inserted Joint, can be furnished.



A-875. FLUSH JOINT.



A-876. DRIVE PIPE COUPLING JOINT.

A-875—This Joint is not strong, and should only be used on Heavy Tubing. A-876—Threads are made straight and ends of Pipe meet or butt in center of coupling, and will therefore stand heavy driving.

CASING FITTINGS.

SIZE — INCHES	2	2¼	2½	2¾	3	3¼	3½	3¾	4
BUSHINGS — EACH	.60	60	60	.60	.60	.80	1.00	1.00	1.50
CAPS — EACH	.80	.80	.80	.80	.80	1.10	1.30	1.30	1.60
COUPLINGS — EACH	.16	.20	.25	.30	35	.40	.46	.52	.60
CROSSES — EACH	2 20	2.20	2.20	2.20	2.20	2.70	3.50	3.50	5.00
CROSSES, REDUCING — EACH	2.75	2.75	2.75	2.75	2.75	3.30	4.35	4.35	6.25
ELBOWS — EACH	1.10	1.10	1.10	1.10	1.10	1.35	1.80	1.80	2.50
ELBOWS, REDUCING — EACH	1.40	1.40	1.40	1.40	1.40	1.75	2.25	2.25	3.00
ELBOWS, 45° — EACH	1.60	1.60	1.60	1.60	1.60	2.00	2.70	2.70	3.75
FLANGE UNIONS — EACH	2.25	2.25	2.25	2.25	2.25	2.75	3.15	3.15	4.50
LOCKNUTS — EACH	.50	.50	.50	.50	.50	.70	.95	.95	1.25
PLUGS — EACH	.50	.50	.50	.50	.50	.75	.85	.85	1.35
REDUCERS — EACH	1.20	1.20	1.20	1.20	1.20	1.50	2.00	2.00	2.75
RETURN BENDS, CLOSE — EACH	3.00	3.00	3.00	3.00	3.00	4.00	5.00	5.00	6.00
RETURN BENDS, OPEN — EACH	3.75	3.75	3.75	3.75	3.75	4.50	5.75	5.75	8.00
TEES — EACH	1.50	1.50	1.50	1.50	1.50	2.00	2.50	2.50	3.50
TEES, REDUCING — EACH	1 85	1.85	1.85	1.85	1.85	2.50	3.00	3.00	4.35
Y'S — EACH	3.25	3.25	3.25	3.25	3.25	4.50	6.00	6.00	8.00

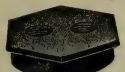
SIZE — INCHES	4½	4½	4¾	5	5⅝	6⅝	7⅝	8⅝	9⅝
BUSHINGS — EACH	1.50	1.85	1.85	2.00	2.50	3.75	5.50	6.50	7.50
CAPS — EACH	1.60	2 00	2.00	2.15	2.35	4.00	4.35	6.00	7.25
COUPLINGS — EACH	.68	.74	.80	90	1.20	1.50	1.75	2.85	3.50
CROSSES — EACH	5.00	5 70	6.00	7 00	7.80	14.00	20.00	26.00	40.00
CROSSES, REDUCING — EACH	6 25	7.00	7.50	8.75	9.70	17.50	25.00	32.00	50.00
ELBOWS — EACH	2.50	3.00	3.00	3.50	4.00	7.00	10.00	13.00	20.00
ELBOWS, REDUCING — EACH	3 00	3.75	3 75	4.35	5.00	8.75	12.50	16.00	25.00
ELBOWS, 45° — EACH	3 75	4.00	4.00	4.50	5.50	9.00	13.00	16.00	25.00
FLANGE UNIONS — EACH	4 50	5 00	5 00	5.50	6.50	8.00	10.00	12.00	15.00
LOCKNUTS — EACH	1.35	1.35	1 35	1.50	1 90	2.50	3.50	4.00	4.50
PLUGS — EACH	1 35	1.75	1 75	2 00	2.40	3.75	5.50	6.50	7.50
REDUCERS — EACH	2 75	3.00	3.00	3 50	4.00	8.00	10.00	12.00	15.00
RETURN BENDS, CLOSE — EACH	6 50	----	----	----	----	----	----	-----	-----
RETURN BENDS, OPEN — EACH	8.00	----	----	----	----	----	----	-----	-----
TEES — EACH	3 55	4.00	4.25	5.00	5.50	10.00	15.00	20.00	25.00
TEES, REDUCING — EACH	4.35	5.00	5.25	6 25	6 75	12.50	18.75	25.00	30.00
Y'S — EACH	8.00	9.00	9.00	10.00	12.00	17.00	25.00	-----	-----

CASING NIPPLES.

SIZE — INCHES	3	3½	3½	3¾	4	4¼	4½	4¾	5	5⅝	6⅝	7⅝	8⅝	9⅝
CLOSE OR SHORT EACH	1 90	1 95	2.30	2.35	2 35	2 40	2.40	2.45	2.55	3.25	4.50	4.50	6.45	7.10
LONG — EACH	2.00	2.10	2.45	2.50	2 50	2 60	2 60	2 70	2.85	3.50	----	----	----	----
6 INCHES LONG — EACH	2.05	----	----	----	----	----	----	----	----	----	4.80	4.75	----	----
7 INCHES LONG — EACH	2.10	2 15	2.50	2.60	2.60	2.70	2 70	2.80	2 95	3.65	5.05	5.00	6.70	7.45
8 INCHES LONG — EACH	2 15	2.20	2.60	2.65	2.75	2 80	2 80	2.95	3 10	3.80	5.30	5.25	7.00	7.80
9 INCHES LONG — EACH	2.25	2.30	2.65	2.75	2.80	2.90	2.90	3.05	3.25	3.95	5.55	5.45	7.30	8.15
10 INCHES LONG — EACH	2.30	2.35	2 70	2.85	2.90	3 00	3 00	3.15	3.40	4.10	5.80	5.70	7.60	8.50
11 INCHES LONG — EACH	2.35	2.40	2.80	2.90	3.00	3.05	3 10	3.25	3.55	4.25	6.05	5.95	7.90	8.85
12 INCHES LONG — EACH	2.40	2.50	2.85	3.00	3.10	3.15	3.20	3.35	3.65	4.40	6.30	6.20	8.20	9.20

Casing substitute Nipples, same list as above. Casing Nipples over 12 inches long, price will be net price of Casing, add two threads.

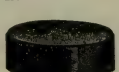
CASING BUSHINGS AND CAPS, TAPPED FOR 2-INCH PIPE.



A-880. CASING BUSHING, 2 HOLES.



A-881. CASING CAP, 1 HOLE.



A-882. CASING CAP, 2 HOLES.

SIZE — INCHES	5	5⅝	6⅝	7⅝	8⅝	9⅝
BUSHINGS OR CAPS — EACH	2,50	3.25	4.75	6.25	7.50	8.50

If tapped for 3-inch pipe, add 25 per cent.



A-885. SPIRAL RIVETED PIPE.

Diameter, Inches.	No. 22 B. W. G.				No. 20 B. W. G.				No. 18 B. W. G.			
	Black.	Asphalted.	Galvanized.	Per 100 Ft. Weight, Lbs.	Black.	Asphalted.	Galvanized.	Per 100 Ft. Weight, Lbs.	Black.	Asphalted.	Galvanized.	Per 100 Ft. Weight, Lbs.
3	.24	.27	.32	130	.27	.30	.38	150	.34	.37	.46	185
4	.30	.34	.43	160	.35	.39	.48	200	.42	.46	.58	245
5	.37	.42	.53	200	.40	.45	.60	250	.50	.55	.70	300
6	.40	.46	.60	230	.46	.52	.68	300	.57	.63	.85	360
7	.45	.52	.65	260	.51	.58	.75	325	.63	.70	.90	400
8	.53	.61	.75	300	.58	.66	.85	360	.73	.81	1.05	460
9	.60	.69	.90	340	.66	.75	.97	410	.82	.91	1.18	525
10	.65	.75	1.00	380	.72	.82	1.05	500	.90	1.00	1.30	575
12	.82	.94	1.25	490	.90	1.02	1.35	600	1.15	1.27	1.65	750
14	1.00	1.14	1.45	575	1.10	1.24	1.60	700	1.35	1.49	1.95	900
16	----	----	----	---	1.30	1.46	1.85	800	1.60	1.76	2.25	1000
18	----	----	----	---	1.40	1.58	2.05	900	1.75	1.93	2.55	1125
20	----	----	----	---	1.60	1.80	2.30	960	2.00	2.20	2.90	1250
24	----	----	----	---	1.95	2.19	2.85	1150	2.40	2.64	3.35	1460

Diameter, Inches.	No. 16 B. W. G.				No. 14 B. W. G.				No. 12 B. W. G.			
	Black	Asphalted.	Galvanized.	Per 100 Ft. Weight, Lbs.	Black.	Asphalted.	Galvanized.	Per 100 Ft. Weight, Lbs.	Black.	Asphalted.	Galvanized.	Per 100 Ft. Weight, Lbs.
4	.50	.54	.70	320	---	---	----	---	----	----	----	---
5	.60	.65	.85	415	---	---	----	---	----	----	----	---
6	.70	.76	1.00	500	.89	.95	1.15	610	1.25	1.31	1.90	800
7	.80	.87	1.10	550	1.02	1.09	1.35	700	1.40	1.47	2.10	910
8	.93	1.01	1.28	650	1.15	1.23	1.50	825	1.55	1.63	2.30	1040
9	1.08	1.17	1.47	750	1.32	1.41	1.70	925	1.70	1.79	2.50	1180
10	1.15	1.25	1.55	800	1.40	1.50	1.80	1025	1.90	2.00	2.75	1300
12	1.45	1.57	2.05	1025	1.80	1.92	2.35	1325	2.50	2.62	3.25	1700
14	1.70	1.84	2.40	1200	2.10	2.24	2.70	1560	2.90	3.04	3.75	2010
16	2.00	2.16	2.75	1375	2.40	2.56	3.15	1790	3.25	3.41	4.25	2310
18	2.20	2.38	3.10	1550	2.75	2.93	3.60	2000	3.60	3.78	4.70	2570
20	2.45	2.65	3.40	1675	3.10	3.30	4.00	2200	4.00	4.20	5.25	2830
24	3.00	3.24	4.30	2000	3.70	3.94	4.85	2620	4.70	4.94	6.25	3380

Manufactured of steel or refined iron. Each length tested to margin of safety. Fittings and Connections to suit service required. For detailed information see special catalogue, sent on application.

Weights given above are approximate per 100 feet for Black Pipe only.

Lengths up to 25 feet Black or Asphalted, and to 20 feet Galvanized.

DOUBLE GALVANIZED FLANGED PRESSURE PIPE FOR EXHAUST STEAM, EXHAUST STEAM HEATING, BRINE CIRCULATING PIPE, ETC.



A-886. FLANGED PRESSURE PIPE.

Made of Galvanized Iron and re-galvanized after formation, thereby making all seams and laps perfectly solid.

Each length tested to 150 pounds hydrostatic pressure.

Pipe and Fittings made to specifications and drawings when desired. Where lengths required are all 5 feet or less, they will be charged as being 5 feet each.

Diameter, Inches.	Price per Foot.	B. W. G. No.	Approx. Weight per Foot, Lbs.
3	.50	20	2¼
4	.70	20	3
5	1.00	20	4
6	1.20	18	5
7	1.40	18	6
8	1.70	18	7
9	2.00	18	8
10	2.60	16	11
12	3.15	16	14
14	4.00	14	20
16	5.00	14	24
18	6.00	14	29
20	7.00	14	34
24	10.50	12	50

LINE PIPE AND HEAVY TAPER COUPLING.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	8	9	10	10	10	12
PRICE . . . . . PER FOOT	.36	.57½	.75½	.95	1.08	1.30	1.45	1.88	2.35	2.50	2.82	3.40	3.20	3.50	4.25	5.20
WEIGHT PER FOOT . POUNDS	3.61	5.74	7.54	9.	10.66	12.49	14.50	18.76	23.27	25.	28.	33.70	32.	35.	40.	49.

OIL WELL TUBING. HEAVY TAPER COUPLING, RECESSED ENDS.

SIZE . . . . . INCHES	2	2	2½	2½	3	3	3	3½	4	4
PRICE . . . . . PER FOOT	.40	.45	.57½	.65	75½	.90	1.05	95	1.08	1.20
WEIGHT PER FOOT . . . . . POUNDS	4.	4.5	5.74	6.25	7.54	8.5	10.	9.	10.66	11.75

SIZE . . . . . INCHES	4½	5	6	7	8	8	9	10	12	..
PRICE . . . . . PER FOOT	1.30	1.45	1.88	2.35	2.82	3.50	3.40	4.25	5.20	....
WEIGHT PER FOOT . . . . . POUNDS	12.49	14.50	18.76	23.27	28.	32.	33.7	40.	49.	....

DRIVE PIPE (HEAVY COUPLING, SEE PAGE 46).

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12
PRICE . . . . . PER FOOT	.36	.57½	.75½	.95	1.08	1.30	1.45	1.88	2.35	2.82	3.40	4.25	5.20
WEIGHT PER FOOT . POUNDS	3.61	5.74	7.54	9.	10.66	12.49	14.50	18.76	23.27	28.	33.7	40.	49.

For Drive Shoes, Drive Heads and Well Supplies, see pages 302 to 360.

WROUGHT IRON PIPE.

SPECIAL NOTICE—Until within comparatively a short time all Wrought Pipe was made from GENUINE Wrought Iron Skelp. To-day practically all is made from Steel. To prevent any confusion we desire to emphasize to the trade the fact that the term WROUGHT IRON PIPE is now construed to mean MERCHANT PIPE, and all quotations are based on STEEL. If GENUINE Wrought Iron Pipe is required, the inquiry or order must so state, when quotation or shipment will be made accordingly. GENUINE Wrought Iron Pipe is considerably more expensive than Steel.

*SEAMLESS DRAWN BRASS AND COPPER TUBING IN 12-FOOT LENGTHS.

I. P. SIZE - - - - - - - - - - INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
OUTSIDE DIAMETER - - - - - INCHES	13/32	17/32	21/32	13/16	1 1/16	1 5/16	1 5/8	1 7/8	2 3/8	2 7/8	3 1/2	4 1/2
THICKNESS - - - - - - STUBS' GAUGE	15	15	13	12	12	11	9	9	8	7	5	3
WEIGHT PER FOOT - - - - - POUNDS	.27	.37	.60	76	1.22	1.63	2.52	2.94	4.28	5.58	8.35	12.24

*Made to correspond with Iron Pipe and to fit Iron Pipe Fittings.

All sizes and weights of Seamless and Brazed Brass Tubing carried in stock.

We can furnish Copper tubes same sizes as above. Brass and Copper Tubes are always shipped without threads or couplings, unless otherwise specified. Threads and Couplings charged extra.

BENEDICT SEAMLESS NICKEL TUBING.

IRON PIPE SIZE, 12-FOOT LENGTHS.

SIZE - - - - - - - - - - - INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	6
APPROX. WEIGHT PER FT. - - - LBS.	.265	.455	.655	.945	1 32	1.79	2.63	3.15	4.30	6.04	8.71	11.44	13.30	14.60	16.50	19.22
PRICE - - - - - - - - - PER LB.	1.30	1.20	1.15	1 10	1.00	1 00	1 00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.10	1.20

An additional charge will be made for cutting to short lengths.

Benedict Nickel is a white metal clear through and has 50 per cent greater tensile strength than Brass. It is not liable to crack, can be readily bent or coiled, and can be flanged either hot or cold.



BRASS AND COPPER WIRE.

NUMBER - - - - - - - - - - -	000	00	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FEET - - - - - - - - - PER POUND	2	2 1/2	3 1/4	4	4 1/2	5 1/4	6 4/10	6 9/10	8 4/10	10 3/4	13 1/10	16	20	22 3/4	28 6/10	40	50
NUMBER - - - - - - - - - - -	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	----
FEET - - - - - - - - - PER POUND	67	85	105	133	200	286	345	405	500	650	800	870	1000	1100	1425	1800	----

Table shows approximate number of feet of Brass Wire in a pound. For Copper, deduct 5 per cent. No. 21 and coarser are numbered by Stubs' Gauge; No. 22 and finer, by London Gauge.

STUBS' WIRE GAUGE IN INCHES (APPROXIMATE).

NUMBER -	1	3	7	11	16	21
INCHES -	5/16	1/4	3/16	1/8	1/16	1/32

To ascertain the weight of Rolled Copper: Find the number of cubic inches in the piece, multiply by 0.3229, and the product will be the weight in pounds.

Or, multiply the length and breadth (in feet) and that by the pounds per square foot.

SHEET COPPER.

OFFICIAL TABLE ADOPTED BY THE ASSOCIATION OF COPPER MANUFACTURERS OF THE UNITED STATES.

WEIGHT PER SQ. FT. - - - - - OZ.	6	8	10	12	14	16	18	20	24	32	40	48
THICKNESS - - - - - - - - INCHES	.00806	0107	.0134	.0161	.0188	.0215	.0242	.0269	.0322	.0430	.0538	.0645
STUBS' GAUGE (NEAREST) - - NO.	33	31	28	27	26	25	24	22	21	19	18	16
14 X 48 INCHES, WEIGHT - - POUNDS	1.75	2.33	2.91	3.50	4.08	4 66	5.25	5.83	7	9.33	11.66	14
24 X 48 INCHES, WEIGHT - - POUNDS	3	4	5	6	7	8	9	10	12	16	20	24
30 X 60 INCHES, WEIGHT - - POUNDS	4.68	6.25	7.81	9.37	10.93	12.50	14.06	15.62	18 75	25	31.25	37.50
36 X 72 INCHES, WEIGHT - - POUNDS	6.75	9	11.25	13.50	15.75	18	20.25	22.50	27	36	45	54
48 X 72 INCHES, WEIGHT - - POUNDS	9	12	15	18	21	24	27	30	36	48	60	72

CAST-IRON FITTINGS.

STANDARD.



B-1. ELBOW.



B-2. REDUCING ELBOW.

ELBOWS, STRAIGHT SIZES.—B-1.

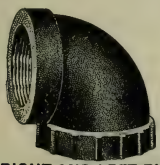
SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PLAIN . . . . . EACH	.05	.05	.06	.08	.10½	.16	.20	.28	.50	.75
GALVANIZED . . . . . EACH	.10	.10	.12	.16	.21	.32	.40	.56	1.00	1.50
PITCHED . . . . . EACH	----	----	----	.10	.13	.20	.25	.35	.65	1.00

SIZE . . . . . INCHES	3½	4	4½	5	6	7	8	9	10	12
PLAIN . . . . . EACH	1.05	1.20	1.75	2.00	2.75	4.70	6.75	9.00	13.50	20.00
GALVANIZED . . . . . EACH	2.10	2.40	3.50	4.00	5.50	9.40	13.50	18.00	27.00	40.00
PITCHED . . . . . EACH	1.30	1.50	----	----	----	----	-----	-----	-----	-----

ELBOWS, REDUCING SIZES.—B-2.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3	3½
PLAIN . . . . . EACH	.06	.07	.09	.12	.18	.23	.32	.60	.85	1.20
GALVANIZED . . . . . EACH	.12	.14	.18	.24	.36	.46	.64	1.20	1.70	2.40

SIZE . . . . . INCHES	4	4½	5	6	7	8	9	10	12	-----
PLAIN . . . . . EACH	1.40	2.00	2.30	3.15	5.40	7.75	10.50	15.50	23.00	-----
GALVANIZED . . . . . EACH	2.80	4.00	4.60	6.30	10.80	15.50	21.00	31.00	46.00	-----



B-3. RIGHT AND LEFT ELBOW.



B-4. 45° ELBOW.

ELBOWS.—B-3 and B-4.

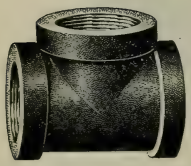
SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3	3½
R. AND L. PLAIN . . . . . EACH	.06	.07	.09	.12	.18	.23	.32	.60	.85	1.20
45° PLAIN . . . . . EACH	.06	.07	.10	.12	.19	.24	.34	.60	.90	1.25
45° GALVANIZED . . . . . EACH	.12	.14	.20	.24	.38	.48	.68	1.20	1.80	2.50

SIZE . . . . . INCHES	4	4½	5	6	7	8	9	10	12	14
R. AND L. PLAIN . . . . . EACH	1.50	2.25	2.40	3.40	----	----	-----	-----	-----	-----
45° PLAIN . . . . . EACH	1.45	2.20	2.50	3.45	5.90	8.50	11.25	17.00	25.00	-----
45° GALVANIZED . . . . . EACH	2.90	4.40	5.00	6.90	11.80	17.00	22.50	34.00	50.00	-----

List of sizes of Cast-Iron Fittings, see pages 75 and 76.

CAST-IRON FITTINGS.

STANDARD.



B-5. TEE.



B-6. TEE REDUCING ON RUN.



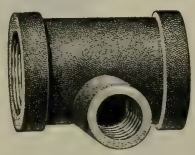
B-7. TEE REDUCING ON SIDE.

TEES, STRAIGHT SIZES.—B-5.

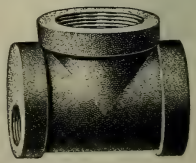
SIZE . . . . . INCHES	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
EACH	.08	.08	.09	.12	.15	.23	.29	.41	.73	1 10
GALVANIZED . . . . . EACH	.16	.16	.18	.24	.30	.46	.58	.82	1.46	2.20
SIZE . . . . . INCHES	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8	9	10	12
EACH	1.50	1.75	2.55	3.00	4.00	6.80	9.75	13.00	19.50	29.00
GALVANIZED . . . . . EACH	3.00	3.50	5.10	6.00	8.00	13.60	19.50	26.00	39.00	58.00

TEES, REDUCING SIZES.—B-6 and B-7.

SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$
EACH	.09	.10	.14	.17	.27	.33	.47	.83	1.25	1.75
GALVANIZED . . . . . EACH	.18	.20	.28	.34	.54	.66	.94	1.66	2.50	3.50
SIZE . . . . . INCHES	4	$4\frac{1}{2}$	5	6	7	8	9	10	12	14
EACH	2.00	2.95	3.50	4.60	7.80	11.25	15.00	22.50	33.50	65.00
GALVANIZED . . . . . EACH	4.00	5.90	7.00	9.20	15.60	22.50	30.00	45.00	67.00	-----



B-10. ECCENTRIC TEE.



B-11. ECCENTRIC TEE.

ECCENTRIC TEES.

These fittings are designed to prevent the accumulation and lodgment of condensation.

Orders must be accompanied with sketch, showing position in which the fitting is to be placed.

Prices on application.

CAST-IRON FITTINGS.

STANDARD.



B-15. CROSS.



B-19. REDUCER.



B-17. Y BRANCH.

CROSSES.—B-15.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4
STRAIGHT SIZES . . . . . EACH	.16	.22	.27	.42	.53	.75	1.30	2.00	2.70	3.15
STRAIGHT SIZES, GALVANIZED EACH	.32	.44	.54	.84	1.06	1.50	2.60	4.00	5.40	6.30
REDUCING SIZES . . . . . EACH	.18	.25	.30	.46	.60	.83	1.45	2.20	3.00	3.50
REDUCING SIZES, GALVANIZED EACH	.36	.50	.60	.92	1.20	1.66	2.90	4.40	6.00	7.00

SIZE . . . . . INCHES	4½	5	6	7	8	9	10	12	14	----
STRAIGHT SIZES . . . . . EACH	4.60	5.50	7.25	12.25	17.50	23.50	35.00	52.50	100.00	----
STRAIGHT SIZES, GALVANIZED EACH	9.20	11.00	14.50	24.50	35.00	47.00	70.00	105.00	200.00	----
REDUCING SIZES . . . . . EACH	5.10	6.00	8.00	13.50	19.25	26.00	38.50	58.00	----	----
REDUCING SIZES, GALVANIZED EACH	10.20	12.00	16.00	27.00	38.50	52.00	77.00	116.00	----	----

Y BRANCHES.—B-17.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	7	8	10	12
EACH	.20	.28	.34	.54	.66	.94	1.66	2.50	3.50	4.00	7.00	9.20	15.60	22.50	45.00	67.00
GALVANIZED . . EACH	.40	.56	.68	1.08	1.32	1.88	3.32	5.00	7.00	8.00	14.00	18.40	31.20	45.00	90.00	134.00
REDUCING . . . EACH	.23	.33	.40	.62	.76	1.08	1.90	2.90	4.00	4.60	8.00	10.60	18.00	26.00	51.75	77.00

REDUCERS.—B-19.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12
EACH	.60	.80	1.00	1.35	1.85	2.00	2.70	5.35	6.75	8.35	10.00	15.00
GALVANIZED . . . . EACH	1.20	1.60	2.00	2.70	3.70	4.00	5.40	10.70	13.50	16.70	20.00	30.00

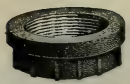
ECCENTRIC REDUCERS.—B-20.



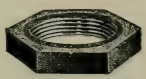
B-20.
ECCENTRIC REDUCER.

	SIZE, INCHES.										
	1x½	1¼x ½	1½x ¾	2x ¾	2½x1	3x1	3½x1	4x1½	4½x2	5x1½	6x1½
	1x¾	1¼x ¾	1½x1	2x1	2½x1¼	3x1¼	3½x1¼	4x1½	4½x2½	5x2	6x2
	-----	1¼x1	1½x1¼	2x1¼	2½x1½	3x1½	3½x1½	4x2	4½x3	5x2½	6x2½
	-----	-----	-----	2x1½	2½x2	3x2	3½x2	4x2½	4½x3½	5x3	6x3
	-----	-----	-----	-----	-----	3x2½	3½x2½	4x3	4½x4	5x3½	6x3½
	-----	-----	-----	-----	-----	-----	3½x3	4x3½	-----	5x4	6x4
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6x4½
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6x5
PRICE . . . . . EACH	1.00	1.00	1.00	1.00	1.50	2.40	3.00	4.00	5.00	6.00	8.00

CAST-IRON FITTINGS.



B-22. CAP.



B-23. LOCKNUT.



B-24. BUSHING.

CAPS.—B-22.

SIZE . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16
EACH	.40	.54	.75	.87	1.05	1.20	1 55	2.50	2.85	4 75	5.50	7.00	19 00	-----
GALVANIZED . EACH	.80	1.08	1 50	1 74	2.10	2.40	3 10	5 00	5 70	9 50	11 00	14 00	-----	-----

LOCKNUTS.—B-23.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12
EACH	.27	.34	.47	64	85	90	1.30	1 70	2.35	2.70	3.00	4.00
GALVANIZED . . . . . EACH	.54	.68	.94	1.28	1.70	1.80	2.60	3.40	4.70	5.40	6.00	8 00

Locknuts smaller than 2½-inch are malleable. See page 94.

BUSHINGS.—B-24.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
EACH	.04	.05	.06	.07	.09	.14	.21	30	.40	.50		
GALVANIZED . . . . . EACH	.08	.10	.12	14	18	.28	.42	.60	.80	1.00		
SIZE . . . . . INCHES	4½	5	6	7	8	9	10	12	---	---		
EACH	.75	.93	1.25	1.87	2.75	3.25	3.75	5.00	-----	-----		
GALVANIZED . . . . . EACH	1.50	1.85	2.50	3 75	5.50	6.50	7.50	10 00	-----	-----		

Bushings reducing one size only, up to and including 2½ inches, are malleable, and will be found listed on page 94.



B-28. PLUG.



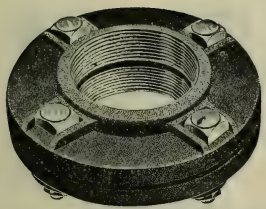
B-29. COUNTERSUNK PLUG.

PLUGS.—B-28 and B-29.

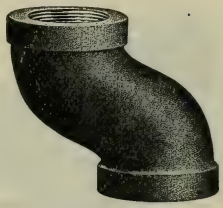
SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½
EACH, B-28	.02	.02	.02	.03	.04	.05	.07	.10	.18	.25	.38
GALVANIZED, B-28 . . . . . EACH	.04	.04	04	.06	08	.10	.14	.20	.36	.50	76
COUNTERSUNK, B-29 . . . . . EACH	----	----	.04	.06	08	.09	.11	.15	.35	----	----
LEFT HAND, B-29 . . . . . EACH	----	----	----	.06	08	09	11	15	----	----	----
SIZE . . . . . INCHES	4	4½	5	6	7	8	9	10	12	14	16
EACH, B-28	.42	.65	.88	1 20	1.85	2.75	3 25	3.75	5 00	20.00	25.00
GALVANIZED, B-28 . . . . . EACH	84	1.30	1.75	2.40	3 70	5 50	6.50	7 50	10 00	----	----

CAST-IRON FITTINGS.

STANDARD.



B-34. STANDARD FLANGE UNION.



B-37. OFFSET.

STANDARD FLANGE UNIONS (With Rubber Gasket).—B-34.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½
EACH	46	.52	.64	.78	1.00	1.25	1.50	1.80	2.10	2.70
GALVANIZED . . . . . EACH	.92	1 04	1.28	1.56	2.00	2.50	3.00	3.60	4.20	5.40

SIZE . . . . . INCHES	5	6	7	8	9	10	12	14	16	...
EACH	3.15	3.95	5.50	7.00	10.00	11.50	16.00	28.00	60.00	-----
GALVANIZED . . . . . EACH	6.30	7.90	11.00	14.00	20.00	23.00	32.00	56.00	-----	-----

OFFSETS.—B-37.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	5	6
TO OFFSET 4 INCHES . . .	.45	70	1.00	1.20	1.80	3.00	4.00	5.00	6.00	8.00	10.00
TO OFFSET 6 INCHES . . .	.67	1.05	1.50	1.80	2.70	4.50	6.00	7.50	9.00	12.00	15.00
TO OFFSET 8 INCHES . . .	.90	1.40	2.00	2.40	3.60	6.00	8.00	10.00	12.00	16.00	20.00

Galvanized Offsets, Double Plain List.



B-40. SIDE OUTLET ELBOW.



B-41. SIDE OUTLET TEE.

SIDE OUTLET ELBOWS.—B-40.

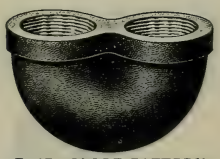
SIZE	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
EACH	.18	.24	.30	.48	.60	84	1.50	2.25	3.15	3.60	5.25	6.00	8.25

SIDE OUTLET TEES.—B-41.

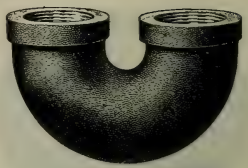
SIZE	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
EACH	.27	.36	.45	.70	.90	1.25	2.25	3.25	4.50	5.25	7.65	9.00	12.00

CAST-IRON FITTINGS.

STANDARD.



B-45. CLOSE PATTERN.



B-46. OPEN PATTERN.

RETURN BENDS, CLOSE PATTERN.—B-45.

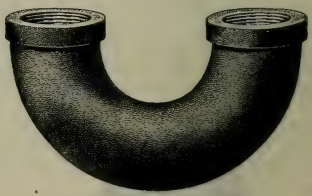
SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
CENTER TO CENTER	1¼	1½	1¾	2¼	2½	3¼	3⅝	4⅜
EACH	.18	.20	.22	.28	.40	.57	1.20	1.70
GALVANIZED . . . . . EACH	.36	.40	.44	.56	.80	1.14	2.40	3.40
RIGHT AND LEFT . . . . . EACH	.21	.23	.26	.33	.46	66	1.40	1.95

RETURN BENDS, OPEN PATTERN.—B-46.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
CENTER TO CENTER	2¼	2½	3	3½	4	5⅜	6½
EACH	.26	.30	.40	.55	.80	1.35	2.20
GALVANIZED . . . . . EACH	.52	.60	.80	1.10	1.60	2.70	4.40
RIGHT AND LEFT . . . . . EACH	.30	.35	.46	.64	.92	1.55	2.50



B-47. BACK OUTLET.



B-48. WIDE PATTERN.

RETURN BENDS, BACK OUTLET.—B-47.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
CENTER TO CENTER	2¼	2½	3	3½	4	5⅜	6½
EACH	.38	.42	.60	80	1.15	2.00	3.00
GALVANIZED . . . . . EACH	.76	.84	1.20	1.60	2.30	4.00	6.00
RIGHT AND LEFT . . . . . EACH	.42	.48	.70	95	1.30	2.30	3.50

RETURN BENDS, WIDE PATTERN.—B-48.

SIZE . . . . INCHES	1	1	1	1	1	1¼	1¼	1½	1½	1½	2	2	4	4
CENTER TO CENTER	3	4	5	6	8	4	6	4⅞	6	8	4⅞	6	7½	11
RIGHT HAND . EACH	.45	.50	.60	.75	1.00	1.00	1.25	1 30	1.60	2.00	1.75	2.00	6.50	7.50
GALVANIZED . EACH	.80	.90	1.10	1.30	1.60	1.75	2.00	2.30	2.60	3.25	3.00	3.25	10.00	11.00

CAST-IRON FITTINGS.

STANDARD.

SUITABLE FOR A WORKING PRESSURE OF 125 POUNDS.



B-52. ELBOW.



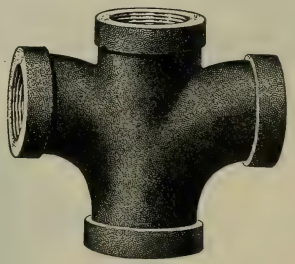
B-53. DOUBLE BRANCH ELBOW.

LONG TURN ELBOWS.—B-52 and B-53.

SIZE . . . . . INCHES	1	1¼	1½	2	2½	3	3½	4
ELLS . . . . . EACH	.32	.40	.55	.80	1.20	2.25	3.25	3.50
DOUBLE ELLS . . . . . EACH	.64	.80	1.10	1.60	2.40	4.50	6.50	7.00
SIZE . . . . . INCHES	4½	5	6	7	8	9	10	12
ELLS . . . . . EACH	5.50	6.50	8.75	13.00	17.00	25.50	30.00	40.00
DOUBLE ELLS . . . . . EACH	11.00	13.00	17.50	26.00	34.00	51.00	60.00	80.00



B-54. TEE.



B-55. CROSS.

LONG TURN TEES AND CROSSES.—B-54 and B-55.

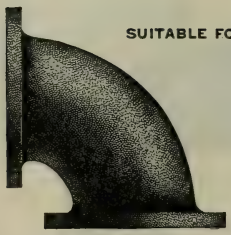
SIZE . . . . . INCHES	1	1¼	1½	2	2½	3	3½	4
TEES . . . . . EACH	.48	.60	.82	1.20	1.80	3.40	4.90	5.25
CROSSES . . . . . EACH	.85	1.10	1.50	2.15	3.20	6.00	8.75	9.50
SIZE . . . . . INCHES	4½	5	6	7	8	9	10	12
TEES . . . . . EACH	8.25	9.75	13.25	19.50	25.50	38.00	45.00	60.00
CROSSES . . . . . EACH	15.00	17.50	24.00	35.00	45.00	68.00	80.00	107.00

Reducing sizes can be furnished to order at special prices.

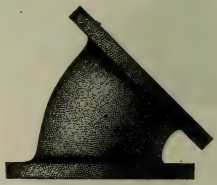
CAST-IRON FITTINGS.

STANDARD.

SUITABLE FOR A WORKING PRESSURE OF 125 POUNDS.



B-60. FLANGED ELBOW



B-61. FLANGED 45° ELBOW.

ELBOWS.—B-60.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES	6	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
WITH FLANGES FACED	4.75	5.00	5.75	6.50	7.25	9.00	9.75	12.00	16.00	20.00	26.00	32.00	44.00	58.00	84.00	108.00
WITH FLANGES FACED AND DRILLED	5.75	6.25	7.00	7.75	9.25	11.00	11.75	14.00	19.75	23.75	30.00	36.00	50.00	65.00	93.00	118.00

45° ELBOWS.—B-61.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES	6	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
FLANGES FACED	5.25	5.50	6.25	7.25	8.00	10.00	10.75	13.00	16.00	20.00	26.00	32.00	44.00	58.00	84.00	108.00
FLANGES FACED AND DRILLED .	6.25	6.75	7.50	8.50	10.00	12.00	12.75	15.00	19.75	23.75	30.00	36.00	50.00	65.00	93.00	118.00



B-62. FLANGED TEE.

TEES.—B-62.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES . . .	6	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
FLANGES FACED	7.00	7.25	8.25	9.50	10.50	13.00	14.25	17.50	23.00	29.00	38.00	46.50	64.00	84.00	122.00	155.00
FLANGES FACED AND DRILLED	8.50	9.00	10.00	11.25	13.50	16.00	17.25	20.50	28.75	34.75	44.00	52.50	73.00	95.00	135.00	170.00

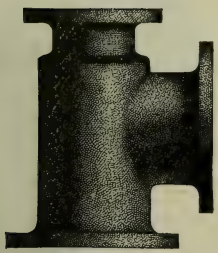
Flanged fittings will always be furnished *faced only*, unless otherwise ordered.

Extra heavy flanged fittings, see pages 71 to 73. Template for drilling, see page 62.

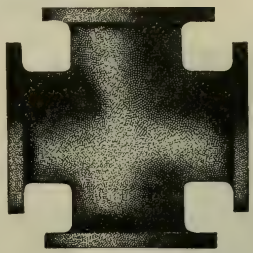
CAST-IRON FITTINGS.

STANDARD.

SUITABLE FOR A WORKING PRESSURE OF 125 POUNDS.



B-63. FLANGED REDUCING TEE.



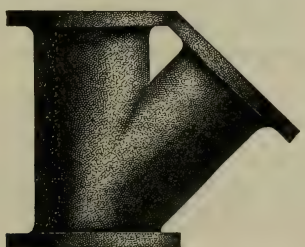
B-64. FLANGED CROSS.

REDUCING TEES.—B-63.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
WITH FLANGES FACED . .	8.00	8.25	9.50	11.00	12.00	15.00	16.25	20.00	26.50	33.50	43.50	53.50	74.00	96.00	140.00	178.00
FLANGES FACED & DRILLED	9.50	10.00	11.25	12.75	15.00	18.00	19.25	23.00	32.00	39.00	50.00	60.00	83.00	107.00	153.00	193.00

CROSSES—B-64.

SIZE . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES .	6	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
WITH FLANGES FACED . .	9.50	10.00	11.50	13.00	14.50	18.00	19.50	24.00	32.00	40.00	52.00	64.00	88.00	116.00	168.00	216.00
FLANGES FACED & DRILLED	11.50	12.50	14.00	15.50	18.50	22.00	23.50	28.00	39.50	47.50	60.00	72.00	100.00	130.00	186.00	236.00



B-65. FLANGED Y BRANCH.

Y BRANCHES.—B-65.

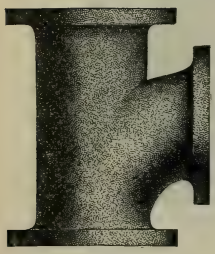
SIZE . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES .	6	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
WITH FLANGES FACED . .	9.50	10.00	11.50	13.00	14 50	18.00	19.50	24.00	32.00	40.00	52.00	64.00	88.00	116.00	168.00	216.00
FLANGES FACED & DRILLED	11.50	12.50	14.00	15.50	18.50	22.00	23.50	28.00	39.50	47.50	60.00	72.00	100.00	130.00	186.00	236.00

Template for drilling, see page 62.

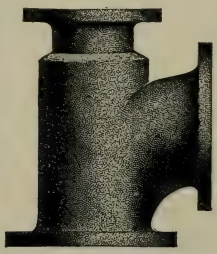
CAST-IRON FITTINGS.

STANDARD.

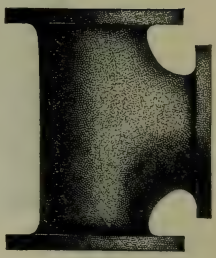
SUITABLE FOR A WORKING PRESSURE OF 125 POUNDS.



B-69.



B-70.



B-71.

LONG TURN TEES.—B-69.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES . .	6	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
FLANGES FACED	8.00	8.25	9.50	11.00	12.00	15.00	16.25	20.00	26.50	33.50	43.50	53.50	74.00	96.00	140.00	178.00
FLANGES FACED AND DRILLED	9.50	10.00	11.25	12.75	15.00	18.00	19.25	23.00	32.00	39.00	50.00	60.00	83.00	107.00	153.00	193.00

LONG TURN REDUCING TEES.—B-70.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
FLANGES FACED	9.50	11.00	12.50	13.75	17.25	18.75	23.00	30.00	38.50	50.00	61.50	85.00	110.00	160.00	205.00
FLANGES FACED AND DRILLED . .	11.25	12.75	14.25	16.75	20.25	21.75	26.00	35.50	44.00	56.50	68.00	94.00	121.00	173.00	220.00

Long Turn Tees with side opening larger than the run, special price.

LONG TURN DOUBLE TEES.—B-71.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
DIAMETER OF FLANGES	7	7½	8½	9	9½	10	11	12½	13½	15	16	19	21	23½	25
FLANGES FACED	8.25	9.50	11.00	12.00	15.00	16.25	20.00	26.50	33.50	43.50	53.50	74.00	96.00	140.00	178.00
FLANGES FACED AND DRILLED . .	10.00	11.25	12.75	15.00	18.00	19.25	23.00	32.00	39.00	50.00	60.00	83.00	107.00	153.00	193.00

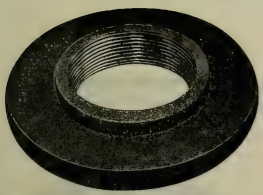
LONG TURN DOUBLE TEES, REDUCING.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18
FLANGES FACED	9.50	11.00	12.50	13.75	17.25	18.75	23.00	30.00	38.50	50.00	61.50	85.00	110.00	160.00	205.00
FLANGES FACED AND DRILLED . .	11.25	12.75	14.25	16.75	20.25	21.75	26.00	35.50	44.00	56.50	68.00	94.00	121.00	173.00	220.00

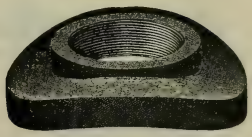
List on Long Turn Double Tees, Reducing, is for sizes increasing one or two sizes on the Branch. If Branch is wanted more than two sizes larger, or reducing on the run, special price will be charged. Template for drilling, see page 62.

CAST-IRON FITTINGS.

STANDARD.



B-75. COMMON FLANGE.



B-76. SADDLE FLANGE.

FLANGES, SMALLER THAN FIVE INCHES.—B-75..

DIAMETER OF FLANGE . . IN.	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	11
Size of Pipe Inches														
¾ EACH	.22	----	.30	----	----	----	----	----	----	----	----	----	----	----
1 EACH	----	----	.30	----	.42	----	----	----	----	----	----	----	----	----
1¼ EACH	----	.25	.30	----	.40	----	----	----	----	----	----	----	----	----
1½ EACH	----	----	.30	----	.40	----	----	----	----	----	----	----	----	----
2 EACH	----	----	----	----	.42	.50	.62	----	.90	----	----	----	----	----
2½ EACH	----	----	----	----	.42	.50	.62	----	.90	----	----	----	----	----
3 EACH	----	----	----	----	----	.50	.62	.75	.90	----	1.15	----	----	----
3½ EACH	----	----	----	----	----	----	----	----	.90	1.00	1.15	----	1.50	----
4 EACH	----	----	----	----	----	----	----	----	.90	1.00	1.15	----	1.50	----
4½ EACH	----	----	----	----	----	----	----	----	----	----	1.15	1.25	1.50	1.75

FLANGES, FIVE INCHES AND LARGER.

DIAMETER OF FLANGE . . . . IN.	10	11	12	12½	13	13½	14	15	16	17	18	19	20
Size of Pipe Inches													
5 EACH	1.50	1.75	2.20	2.20	----	----	----	----	----	----	----	----	----
6 EACH	1.50	1.75	2.20	2.20	2.80	2.80	3.25	----	----	----	----	----	----
7 EACH	----	----	2.20	2.20	2.80	2.80	3.25	4.00	----	----	----	----	----
8 EACH	----	----	----	----	2.80	2.80	3.25	4.00	5.00	----	----	----	----
9 EACH	----	----	----	----	----	----	----	4.00	5.00	5.75	----	----	----
10 EACH	----	----	----	----	----	----	----	----	5.00	5.75	7.00	7.50	----
12 EACH	----	----	----	----	----	----	----	----	----	----	7.00	7.50	8.50

B-76 Saddle Flanges made to order at double above prices.
Galvanized Flanges at double above prices.



B-77. FLOOR FLANGE.

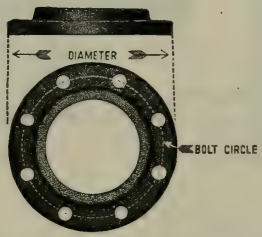
FLOOR FLANGES.—B-77.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2
DIAMETER OF FLANGE	3	3½	3½	4	4	4½	5½
EACH	.10	.15	.15	.16	.16	.22	.35

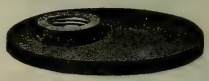
STANDARD CAST IRON FLANGES.

UNIVERSAL TEMPLATE.

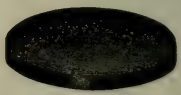
ADOPTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS AND THE MASTER STEAM AND HOT WATER FITTERS' ASSOCIATION.



B-78. FLANGE FACED AND DRILLED.



B-79. ECCENTRIC FLANGE.



B-80. BLIND FLANGE.

STANDARD FLANGES.

TEMPLATE FOR DRILLING CLOW FLANGED FITTINGS AND VALVES AND PRICE LIST OF FLANGES TO MATCH.

PIPE SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
DIAMETER OF FLANGE . . . . . INCHES	6	7	7½	8½	9	9½	10	11	12½	13½
THICKNESS OF FLANGE . . . . . INCHES	5/8	11/16	3/4	13/16	15/16	15/16	15/16	1	1 1/16	1 1/16
DIAMETER OF BOLT CIRCLE . . . . . INCHES	4¾	5½	6	7	7½	7¾	8½	9½	10¾	11¾
NUMBER OF BOLTS	4	4	4	4	4	8	8	8	8	8
SIZE OF BOLTS . . . . . INCHES	5/8	5/8	5/8	5/8	3/4	3/4	3/4	3/4	3/4	3/4
FLANGES, FACED . . . . . EACH	1.20	1.40	1.60	1.80	2.15	2.50	2.80	3.20	4.35	5.00
FLANGES, FACED AND DRILLED . . . . . EACH	1.50	2.00	2.25	2.50	3.00	3.35	3.65	4.00	5.75	6.50
ECCENTRIC FLANGES, FACED . . . . . EACH	....	....	3.25	3.60	4.30	5.00	5.60	6.40	8.70	10.00
ECCENTRIC FLANGES, FACED AND DRILLED . EACH	....	....	4.00	4.30	5.15	5.85	6.50	7.25	10.00	11.50

PIPE SIZE . . . . . INCHES	9	10	12	14	15	16	18	20	22	24
DIAMETER OF FLANGE . . . . . INCHES	15	16	19	21	22½	23½	25	27½	29½	32
THICKNESS OF FLANGE . . . . . INCHES	1 1/16	1 1/16	1 1/16	1 3/8	1 3/8	1 7/16	1 9/16	1 11/16	1 13/16	1 7/8
DIAMETER OF BOLT CIRCLE . . . . . INCHES	13¼	14¼	17	18¾	20	21¼	22½	25	27¼	29½
NUMBER OF BOLTS	12	12	12	12	16	16	16	20	20	20
SIZE OF BOLTS . . . . . INCHES	3/4	7/8	7/8	1	1	1	1 1/8	1 1/8	1 1/4	1 1/4
FLANGES, FACED . . . . . EACH	6.75	7.75	10.50	13.75	18.00	22.50	27.50	30.00	33.75	41.00
FLANGES, FACED AND DRILLED . . . . . EACH	8.25	9.25	12.50	16.00	21.00	26.00	31.00	34.00	39.00	46.00
ECCENTRIC FLANGES, FACED . . . . . EACH	13.00	15.00	18.00	23.00	30.00	37.00	40.00	45.00	50.00	60.00
ECCENTRIC FLANGES, FACED AND DRILLED . EACH	14.50	16.50	20.50	26.00	33.00	41.00	45.00	51.00	58.00	68.00

Flanges, Flanged Fittings, Flanged Valves, etc., are drilled in multiples of four so that the Flanges may be made to face in any quarter, with drilling straddle vertical axis.

Blind Flanges from 2x6½ to 16x24, inclusive, 25 per cent. net higher than above list.

For Machine Bolts, see page 63.

MACHINE BOLTS, WITH SQUARE HEADS AND NUTS.



B-84. SQUARE HEAD BOLT.



B-85. HEXAGON HEAD BOLT.

B-84. PRICES PER HUNDRED.

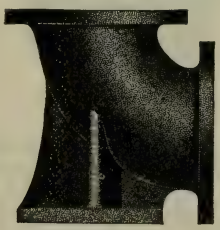
DIAMETER INCHES	1/4	5/16	3/8	7/16	1/2	9/16 and 5/8	3/4	7/8	1
Length in Inches.									
1½	1.70	2.00	2.40	2.80	3.60	5.20	7.20	10.50	15.10
2	1.78	2.12	2.56	3.00	3.86	5.58	7.70	11.20	16.00
2½	1.86	2.24	2.72	3.20	4.12	5.96	8.20	11.90	16.90
3	1.94	2.36	2.88	3.40	4.38	6.34	8.70	12.60	17 80
3½	2.02	2.48	3.04	3.60	4.64	6.72	9.20	13.30	18.70
4	2.10	2.60	3.20	3.80	4.90	7.10	9.70	14.00	19.60
4½	2.18	2.72	3.36	4.00	5.16	7.48	10.20	14.70	20.50
5	2.26	2.84	3.52	4.20	5.42	7.86	10.70	15.40	21.40
5½	2.34	2.96	3.68	4.40	5.68	8.24	11.20	16.10	22.30
6	2.42	3.08	3.84	4.60	5.94	8.62	11.70	16.80	23.20
6½	2.50	3.20	4.00	4.80	6.20	9.00	12.20	17.50	24.10
7	2.58	3.32	4.16	5.00	6.46	9.38	12.70	18.20	25.00
7½	2.66	3.44	4.32	5.20	6.72	9.76	13.20	18.90	25.90
8	2.74	3.56	4.48	5.40	6.98	10.14	13.70	19.60	26.80

Bolts with Hexagon Heads or Hexagon Nuts, B-85, 10 per cent. extra. If both Hexagon Heads and Hexagon Nuts, 20 per cent. extra.

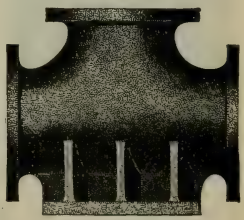
EXTRA HEAVY BASE FITTINGS.



B-86. ELBOW, SCREWED.



B-87. ELBOW, FLANGED.



B-88. TEE, FLANGED.

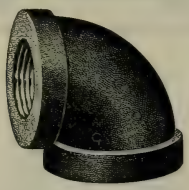
We make Base Fittings, as shown, for use at the bottom of pipe columns. Can be furnished either with screwed or flanged ends.

Prices on application.

CAST-IRON FITTINGS.

EXTRA HEAVY.

SUITABLE FOR A WORKING PRESSURE OF 250 LBS. TESTED TO 800 LBS. PRESSURE PER SQUARE INCH.



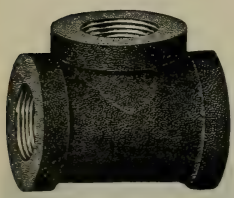
B-89. ELBOW.



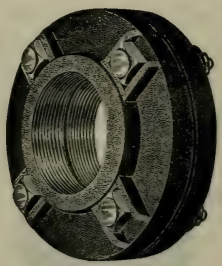
B-90. 45° ELBOW.

EXTRA HEAVY FITTINGS.—B-89 and B-90.

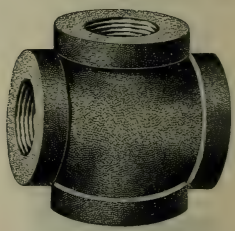
SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	10	12
ELBOWS . . . . . EACH	.30	.35	.45	.60	.75	1.25	2.00	2.75	3.50	4.25	5.50	8.00	12.00	17.00	28.00	40.00
ELBOWS, REDUCING. . EACH	.40	.45	.55	.75	.95	1.55	2.50	3.40	4.40	5.30	6.80	10.00	15.00	21.00	35.00	50.00
ELBOWS, 45° . . . . EACH	.40	.45	.55	.70	.90	1.50	2.50	3.50	4.50	5.50	6.75	9.75	14.50	21.00	34.00	48.00
SOLID PLUGS . . . . EACH	.06	.08	.10	.13	.20	.35	.50	.75	.85	1.35	1.75	2.40	3.75	5.50	7.50	10.00



B-91. TEE.



B-92. FLANGE UNION.



B-93. CROSS.

EXTRA HEAVY FITTINGS.—B-91, B-92 and B-93.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	10	12
TEES . . . . . EACH	.45	.55	.70	.90	1.15	1.80	3.00	4.25	5.50	6.75	8.25	12.00	18.00	25.00	42.00	60.00
TEES, REDUCING . . . . EACH	.65	.75	1.00	1.25	1.60	2.50	4.25	5.30	7.25	8.50	11.50	15.00	23.00	32.00	53.00	75.00
CROSSES . . . . . EACH	.65	1.00	1.25	1.60	2.00	3.25	5.50	7.50	10.00	13.00	15.00	22.00	32.00	42.00	68.00	98.00
CROSSES, REDUCING . . . EACH	.85	1.25	1.60	2.00	2.50	4.00	6.90	9.35	12.50	16.25	18.75	27.50	40.00	52.50	85.00	122.00
FLANGE UNIONS . . . . . EACH	1.75	1.75	2.30	3.20	3.50	4.40	6.20	7.60	8.80	-----	9.90	11.60	21.00	28.00	35.00	-----

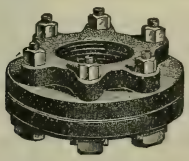
Our Extra Heavy Fittings are made with a longer radius than the ordinary fittings, thus reducing friction. We do not recommend the use of screwed fittings above 8 inches. For larger sizes flanged are more suitable.

HYDRAULIC CAST IRON FITTINGS.

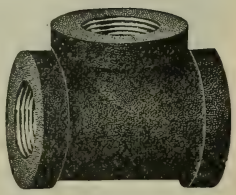
SUITABLE FOR A WORKING PRESSURE OF 800 POUNDS.



B-94. ELBOW.



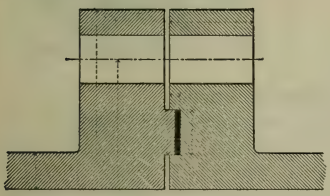
B-95. FLANGE UNION.



B-96. TEE.

HYDRAULIC FITTINGS.—B-94, B-95 and B-96.

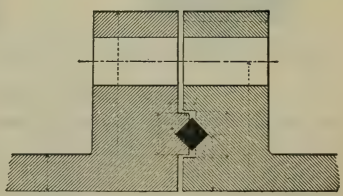
SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
ELBOWS . . . . . EACH	.30	.45	.50	.70	.80	1.25	1.85	2.25	2.75	3.00	4.00	5.00	6.00
45° ELBOWS . . . . . EACH	.45	.65	.75	1.00	1.25	1.75	2.25	2.50	3.00	3.50	4.50	5.25	6.25
TEES . . . . . EACH	.45	.65	.75	1.05	1.30	1.90	2.75	3.30	4.00	4.50	6.00	7.50	9.00
CROSSES . . . . . EACH	.60	.90	1.00	1.40	1.60	2.50	3.70	4.50	5.50	6.00	8.00	10.00	12.00
FLANGE UNIONS, WITH RUBBER GASKETS . EACH	1.20	1.30	1.40	1.50	2.00	2.25	3.00	3.50	4.00	4.50	5.00	5.50	6.50



B-104. RECESS.
TONGUE AND GROOVE FLANGE.

SPECIAL CASTINGS.

FOR LARGE PIPE AND HIGH PRESSURES.

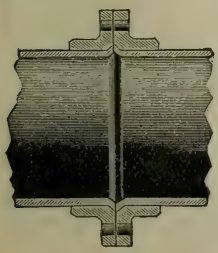


B-105. DIAMOND.
TONGUE AND GROOVE FLANGE.

Any special casting that can be made, we can make.

Our Foundry equipment is complete for the prompt and careful execution of all special as well as standard work. The quality of our Castings is the highest attainable with skill and experience, by the most approved methods, from the best of materials.

The two styles of Tongue and Groove Flanges shown above are frequently used on large sizes of Flanged Fittings for high pressures. The boss on the face of one Flange fits snugly into a corresponding recess on the other, producing a very close fitting joint, even without packing. This joint is sealed by the Gasket, the Recess receiving a flat Gasket into the recess, while in the Diamond, both boss and recess are grooved to take a square Gasket. Either style insures a permanently tight, secure joint as impassable as the sides of the Fitting itself.

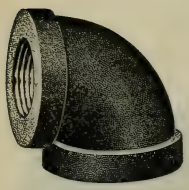


B-110. PEENED PIPE.

PEENED PIPE.—B-110.

SPECIAL FLANGING FOR HIGH PRESSURES AND LARGE PIPE.

For high pressure work and large sizes of Pipe, the special flanging here shown is frequently desirable. The Flanges are bored to fit the Pipe and the inside corner of the Flange face is chamfered. The Pipe is then inserted and the end expanded and peened down against the chamfered edge or bevel of the Flange. The latter is not threaded and no rivets are used.

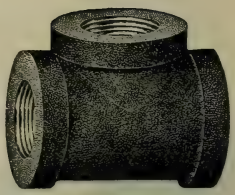


B-114. ELBOW.

EXTRA HEAVY MALLEABLE FITTINGS.

MADE FROM STANDARD CAST-IRON FITTING PATTERNS.

SUITABLE FOR A WORKING PRESSURE OF 250 POUNDS.



B-115. TEE.

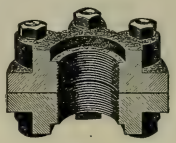
EXTRA HEAVY MALLEABLE IRON FITTINGS.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	8
ELBOWS . . . . . EACH	.20	.25	.30	.35	.40	.55	.70	.90	1.50	2.40	....	4.25	....	6.50	9.50	.....
TEES . . . . . EACH	.30	.40	.45	.50	.60	.80	1.05	1.35	2.25	3.60	....	6.50	....	9.75	14.25	.....
FLANGE UNIONS . EACH	....	....	....	1.40	1.60	2.00	2.50	3.00	3.50	4.40	5.25	6.00	7.00	8.00	9.00	18.00

Straight sizes only carried in stock. Reducing sizes made to order.



B-119. EXTRA HEAVY UNION.



B-119. SECTIONAL VIEW.



B-120. DART FLANGE UNION.

CAST IRON FLANGE UNIONS, RECESSED PATTERN.—B-119.

SIZE . . . . . INCHES	1¼	1½	2	2½	3	3½	4	5	6
DIAMETER OF FLANGES	5	6¼	6¼	7¾	8¼	8⅞	9¼	10¼	11⅞
NUMBER OF BOLTS	5	5	5	6	6	6	8	8	8
EACH	2.30	3.20	3.50	4.40	6.20	7.60	8.80	9.90	11.60

DART FLANGE UNIONS.—B-120.

SIZE . . . . . INCHES	1¼	1½	2	2½	3	3½	4	5	6
PRICE . . . . . EACH	1.20	1.60	2.00	3.20	4.80	6.00	7.50	10.00	12.50

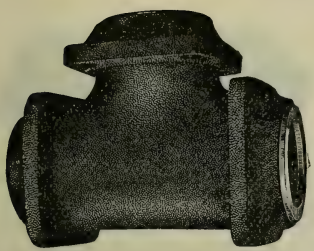


B-123. DROP FORGED UNION.

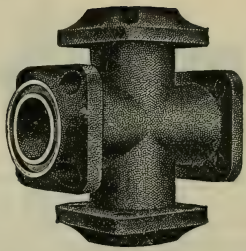
DROP FORGED UNIONS.—B-123.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	*2	2½	3
NUMBER OF BOLTS . . .	2	2	2	2	2	2	3	3	4
SIZE OF BOLTS	$\frac{7}{16}$	$\frac{7}{16}$	½	½	½	⅝	½	⅝	¾
PRICE . . . . . EACH	1.00	1.20	1.50	1.80	2.00	2.20	2.50	2.75	3.00

*Special pattern. In ordering, give number of bolts.



B-134. SQUARE FLANGE AMMONIA TEES.



B-135. SQUARE FLANGE AMMONIA CROSSES.

SEMI-STEEL SQUARE FLANGE AMMONIA TEES.—B-134.

SIZE INCHES	1¼x1¼	1¼x2	2x1¼	2x2	2x2½	2x3	2½x2	2½x2½	2½x3	2½x3½	3x2
LENGTH INCHES	8½	8½	8½	8½	8½	8½	12	12	12	12	12
RUN, SIZE FLANGE, SQUARE INCHES	4½	4½	4½	4½	4½	4½	5½	5½	5½	5½	6
OUTLET, CENTER TO FACE INCHES	4½	4½	4½	4½	6	6	6	6	6	6½	6
OUTLET, SIZE FLANGE, SQUARE INCHES	4½	4½	4½	4½	5½	6	4½	5½	6	6½	4½
WITHOUT COMP. FLANGES, BOLTS AND GASKETS EACH	5.00	5.00	5.00	5.00	7.00	7.50	9.00	9.00	11.00	12.50	10.00
WITH COMP. FLANGES, BOLTS AND GASKETS EACH	8.50	8.50	8.50	8.50	12.50	13.50	16.25	18.00	20.75	22.50	18.75

SIZE INCHES	3x2½	3x3	3x3½	3x4	3½x2	3½x2½	3½x3	3½x3½	3½x4	3½x5	4x2
LENGTH INCHES	12	12	12	12	13	13	13	13	13	13	14
RUN, SIZE FLANGE, SQUARE INCHES	6	6	6	6	6½	6½	6½	6½	6½	7	7
OUTLET, CENTER TO FACE INCHES	6	6	6½	7	6½	6½	6½	6½	7	7½	7
OUTLET, SIZE FLANGE, SQUARE INCHES	5½	6	6½	7	4½	5½	6	6½	7	8	4½
WITHOUT COMP. FLANGES, BOLTS AND GASKETS EACH	11.00	11.00	12.50	12.50	13.00	13.00	13.00	13.50	14.00	15.00	15.00
WITH COMP. FLANGES, BOLTS AND GASKETS EACH	20.75	22.25	24.00	25.00	22.25	23.00	24.75	25.50	27.00	29.50	26.25

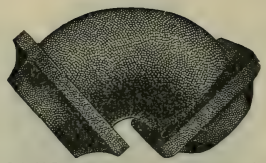
SIZE INCHES	4x2½	4x3	4x3½	4x4	4x5	5x2	5x2½	5x3	5x3½	5x4	5x5
LENGTH INCHES	14	14	14	14	14	15	15	15	15	15	15
RUN, SIZE FLANGE, SQUARE INCHES	7	7	7	7	7	8	8	8	8	8	8
OUTLET, CENTER TO FACE INCHES	7	7	7	7	7½	7½	7½	7½	7½	7½	7½
OUTLET, SIZE FLANGE, SQUARE INCHES	5½	6	6½	7	8	4½	5½	6	6½	7	8
WITHOUT COMP. FLANGES, BOLTS AND GASKETS EACH	15.25	15.50	16.00	16.00	17.00	17.00	17.00	20.00	22.00	23.00	24.00
WITH COMP. FLANGES, BOLTS AND GASKETS EACH	28.25	29.25	30.00	31.00	33.50	34.00	34.50	36.00	39.50	40.00	43.00

SEMI-STEEL SQUARE FLANGE AMMONIA CROSSES.—B-135.

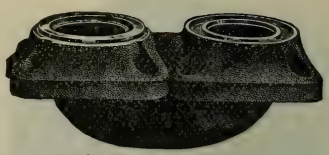
SIZE INCHES	1¼x1¼	2x1¼	2x2	2½x2	2½x2½	3x2	3x2½	3x3	3½x2	3½x2½	3½x3	3½x3½
RUN, LENGTH INCHES	8½	8½	8½	12	12	12	12	12	13	13	13	13
RUN, SIZE FLANGE, SQUARE INCHES	4½	4½	4½	5½	5½	6	6	6	6½	6½	6½	6½
OUTLET, LENGTH INCHES	8½	8½	8½	12	12	12	12	12	13	13	13	13
OUTLET, SIZE FLANGE, SQUARE INCHES	4½	4½	4½	4½	5½	4½	5½	6	4½	5½	6	6½
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS EACH	6.00	6.50	7.00	9.00	10.00	11.00	12.00	12.00	13.00	15.00	19.00	20.00
WITH COMPANION FLANGES, BOLTS AND GASKETS EACH	10.65	11.15	11.65	17.50	18.35	19.85	25.50	27.00	23.50	29.00	34.50	36.00

SIZE INCHES	4x2	4x2½	4x3	4x3½	4x4	5x2	5x2½	5x3	5x3½	5x4	5x5	----
RUN, LENGTH INCHES	14	14	14	14	14	15	15	15	15	15	15	----
RUN, SIZE FLANGE, SQUARE INCHES	7	7	7	7	7	8	8	8	8	8	8	----
OUTLET, LENGTH INCHES	14	14	14	14	14	15	15	15	15	15	15	----
OUTLET, SIZE FLANGE, SQUARE INCHES	4½	5½	6	6½	7	4½	5½	6	6½	7	8	----
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS EACH	21.00	22.00	22.50	25.00	26.00	26.00	27.00	28.00	29.00	30.00	32.00	----
WITH COMPANION FLANGES, BOLTS AND GASKETS EACH	33.50	38.00	40.00	43.00	46.00	41.00	45.20	47.00	49.00	52.50	57.00	----

For Ammonia Valves, see pages 125 and 126.



B-138 SQUARE FLANGE AMMONIA ELBOWS.



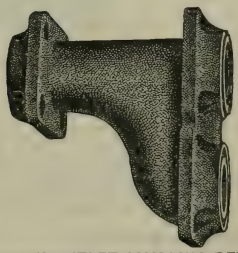
B-139. SQUARE FLANGE AMMONIA RETURN BENDS.

SEMI-STEEL, SQUARE FLANGE AMMONIA ELBOWS.—B-138.

SIZE PIPE . . . . . INCHES	1½	2	2	2	2	2½	3	3½	4	5
RADIUS . . . . . INCHES	2½	2½	4⅜	4⅜	4⅜	2½	2¾	3½	3⅜	4½
CENTER TO FACE . . . . . INCHES	4½	4½	7½	7½	7½	6	6	6½	7	7½
CENTER TO FACE . . . . . INCHES	4¼	4¼	7½	8¼	12	6	6	6½	7	7½
SIZE FLANGE, OUTSIDE . . . . . INCHES	4½	4½	4½	4½	4½	5½	6	6½	7	8
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS . EACH	3.25	3.60	4.50	4.50	5.50	6.50	8.50	10.00	13.50	17.00
WITH COMPANION FLANGES, BOLTS AND GASKETS . . . EACH	5.50	6.00	6.85	6.85	7.85	12.50	16.00	18.00	23.50	30.00

SEMI-STEEL, SQUARE FLANGE AMMONIA RETURN BENDS.—B-139.

SIZE PIPE . . . . . INCHES	2	2	2	2	2
CENTER OF OUTLETS . . . . . INCHES	4⅝	6	7	8½	10
SIZE FLANGE, OUTSIDE . . . . . INCHES	4½	4½	4½	4½	4½
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS . . . EACH	2.25	2.50	2.70	3.00	3.50
WITH COMPANION FLANGES, BOLTS AND GASKETS . . . . . EACH	4.60	4.85	5.05	5.35	5.85



B-144. BACK OUTLET AMMONIA RETURN BEND.



B-145. TOP OUTLET AMMONIA RETURN BEND.

BACK OUTLET, SEMI-STEEL, SQUARE FLANGE AMMONIA RETURN BENDS.—B-144.

SIZE PIPE, FRONT OUTLETS . . . . . INCHES	1¼	1¼	2
FRONT OUTLET, CENTER OF OUTLETS . . . . . INCHES	3⅜	3⅜	4⅝
BACK OUTLET, SIZE PIPE . . . . . INCHES	¾	1¼	2
FACE OUTLETS TO FACE OF BACK OUTLET . . . . . INCHES	6	6½	8½
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS . . . . . EACH	4.50	5.00	5.00

TOP OUTLET, SEMI-STEEL, SQUARE FLANGE AMMONIA RETURN BENDS.—B-145.

SIDE OUTLET, SIZE PIPE . . . . . INCHES	1¼	1¼	2	2
SIDE OUTLET, CENTER OF OUTLETS . . . . . INCHES	3⅜	3⅜	4⅝	4⅝
TOP OUTLET, SIZE PIPE . . . . . INCHES	¾	1¼	2	1¼
TOP OUTLET, CENTER PIPE TO TOP OUTLET . . . . . INCHES	3¾	3¾	4⅝	4⅝
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS . . . . . EACH	4.50	5.00	5.00	5.00

For Ammonia Valves, see pages 125 and 126.



B-148. WROUGHT IRON AMMONIA ELBOWS.



B-149. WROUGHT IRON AMMONIA RETURN BENDS.

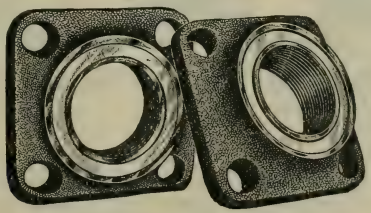
WROUGHT IRON FLANGED AMMONIA ELBOWS.—B-148.

SIZE PIPE . . . . . INCHES	1½	2
RADIUS . . . . . INCHES	4	7½
CENTER TO FACE . . . . . INCHES	10	13½
WITH FLANGES SOLDERED ON . . . . . EACH	3.50	5.00
WITH COMPANION FLANGES, BOLTS AND GASKETS . . . . . EACH	5.85	7.35

WROUGHT IRON FLANGED AMMONIA RETURN BENDS.—B-149.

SIZE PIPE . . . . . INCHES	1	1	1¼	1½	2	2	2	2
CENTER TO CENTER PIPE . . . . . INCHES	5	6	6	8	10	15	18	24
CENTER BEND TO FACE . . . . . INCHES	8	8	8	10	11	13½	15	18
WITH FLANGES SOLDERED ON . . . . . EACH	2.70	2.75	3.00	4.00	5.00	5.50	6.00	6.50

B-148 and B-149 Elbows and Bends are made of extra strong pipe, and are put together in following manner: The thread on pipe is first tinned and allowed to cool, then the flange is tinned and while *hot* is quickly screwed on cold pipe, thereby shrinking, on cooling, to a perfect joint; the recess in back of flange is then flushed with solder, and the whole tested under water with 500 lbs. air pressure per square inch.



MALE. FEMALE.

B-151. DROP FORGED, SEMI-STEEL SQUARE AMMONIA FLANGES.

SIZE PIPE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	1½	1½	2
OUTSIDE SIZE OF FLANGE . . . . . INCHES	4½	4½	4½	4½	4½	4½	4½	5½	6	4½
CENTER OF BOLTS . . . . . INCHES	3 1/16	3 1/16	3 1/16	3 1/16	3 1/16	3 1/16	3 1/16	3⅜	4⅛	3 1/16
NUMBER OF BOLTS	4	4	4	4	4	4	4	4	4	4
SIZE BOLTS . . . . . INCHES	⅝	⅝	⅝	⅝	⅝	⅝	⅝	¾	¾	⅝
WITHOUT BOLTS AND GASKETS . . . . . EACH	1.20	1.20	1.20	1.20	1.20	1.20	1.20	3.00	3.75	1.20
WITH BOLTS AND GASKETS . . . . . PER PAIR	2.65	2.65	2.65	2.65	2.65	2.65	2.65	6.75	8.25	2.65

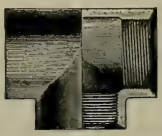
For Ammonia Valves, see pages 125 and 126.

CAST AND DROP FORGED STEEL AMMONIA FITTINGS.

TESTED AT 300 POUNDS AIR PRESSURE.



B-154. STEEL ELBOW.



B-156. STEEL TEE.



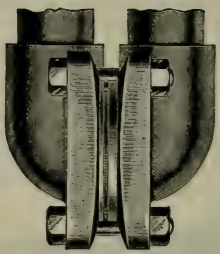
B-158. STEEL CROSS.

CAST STEEL AMMONIA FITTINGS.

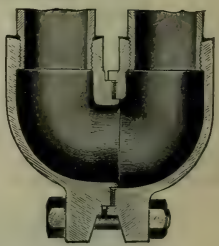
SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
ELBOWS, STRAIGHT SIZES . EACH	.85	.85	.95	1.15	1.25	1.55	1.95	2.70	3.50	5.10	5.65	6.95	8.30	11.50
TEES, STRAIGHT SIZES . . EACH	.85	.95	1.10	1.25	1.55	1.95	2.45	3.65	5.10	6.50	7.15	10.20	12.50	16.60
CROSSES, STRAIGHT SIZES . EACH	.90	1.05	1.30	1.40	1.85	2.35	2.95	4.65	6.85	7.90	8.65	13.50	16.65	21.70



B-161. STEEL RETURN BEND.

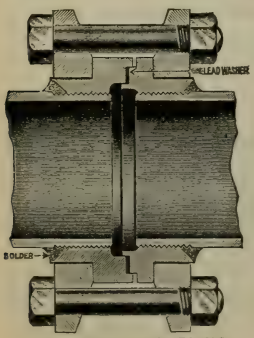


B-163 STEEL RETURN BEND, FLANGED.



B-163. SECTIONAL.

Return Bends made in 2-inch only; 3½ inches center to center. Screwed, each, $2.00; Flanged, each, $3.65. These Bends are intended for Atmospheric Ammonia Condensers.



B-170. STEEL COUPLING.

AMMONIA STEEL FLANGED COUPLINGS.

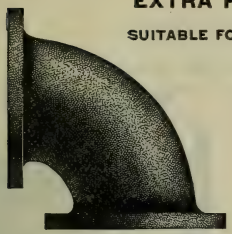
SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2
EACH	.85	.90	1.15	1.30	1.65	2.15	2.75
SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6
EACH	3.75	4.45	5.15	6.65	7.60	7.85	9.15

All Couplings are made of Cast Steel except the 2-inch, which are made of Drop Forged Steel, and are intended for direct expansion work to cool rooms, etc. All are provided with lead gaskets.

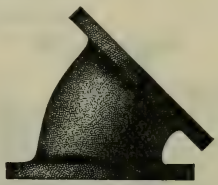
Reducing sizes furnished to order.

EXTRA HEAVY CAST-IRON FITTINGS.

SUITABLE FOR A WORKING PRESSURE OF 250 POUNDS.



B-173. FLANGED ELBOW.



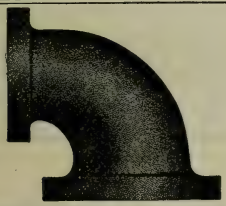
B-175. FLANGED 45° ELBOW.

ELBOWS.—B-173.

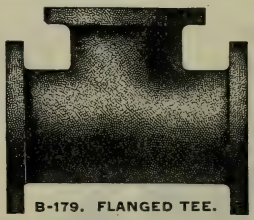
SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18	20
DIAMETER OF FLANGES . .	7½	8½	9	10	10½	11	12½	14	15	16	17½	20	22½	25	27	29½
WITH FLANGES FACED . . .	5.00	5.75	6.50	7.25	9.00	9.75	12.00	16.00	20.00	26.00	32.00	44.00	58.00	84.00	108.00	135.00
FLANGES FACED & DRILLED .	6.25	7.00	7.75	9.25	11.00	11.75	14.00	19.75	23.75	30.00	36.00	50.00	65.00	93.00	118.00	148.00

45° ELBOWS —B-175.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18	20
DIAMETER OF FLANGES . .	7½	8½	9	10	10½	11	12½	14	15	16	17½	20	22½	25	27	29½
WITH FLANGES FACED . . .	5.50	6.25	7.25	8.00	10.00	10.75	13.00	16.00	20.00	26.00	32.00	44.00	58.00	84.00	108.00	135.00
FLANGES FACED & DRILLED .	6.75	7.50	8.50	10.00	12.00	12.75	15.00	19.75	23.75	30.00	36.00	50.00	65.00	93.00	118.00	148.00



B-178. FLANGED RED. TAPER EL.



B-179. FLANGED TEE.

FLANGED REDUCING TAPER ELBOWS.—B-178.

SIZE . . . . . INCHES	3½x3	4x2	4x3	5x3	5x4	6x3	6x4	6x5	7x5	7x6	8x4	8x5
CENTER TO FACE . . . . . INCHES	6½	7	7	8	8	8½	8½	8½	9	9	10	10
DIAMETER OF FLANGES . . INCHES	9x8½	10x6½	10x8½	11x8½	11x10	12½x8½	12½x10	12½x11	14x11	14x12½	15x10	15x11
FACED FLANGES . . . . . EACH	13.00	14.50	14.50	19.50	19.50	24.00	24.00	24.00	32.00	32.00	40.00	40.00
FACED AND DRILLED FLANGES . EACH	15.50	18.50	18.50	23.50	23.50	28.00	28.00	28.00	39.50	39.50	47.50	47.50

SIZE . . . . . INCHES	8x6	10x5	10x6	10x8	12x8	12x10	14x10	14x12	15x10	15x12	16x12	16x14
CENTER TO FACE . . . . . INCHES	10	11½	11½	11½	13	13	14½	14½	15	15	16	16
DIAMETER OF FLANGES . . INCHES	15x12½	17½x11	17½x12½	17½x15	20x15	20x17½	22½x17½	22½x20	23½x17½	23½x20	25x20	25x22½
FACED FLANGES . . . . . EACH	40.00	64.00	64.00	64.00	88.00	88.00	116.00	116.00	144.00	144.00	168.00	168.00
FACED AND DRILLED FLANGES . EACH	47.50	72.00	72.00	72.00	100.00	100.00	130.00	130.00	160.00	160.00	186.00	186.00

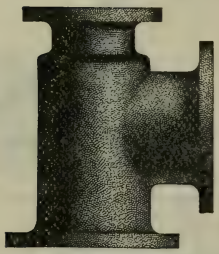
TEES.—B-179.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	9	10	12	14	16	18	20
DIAMETER OF FLANGES . .	7½	8½	9	10	10½	11	12½	14	15	16	17½	20	22½	25	27	29½
WITH FLANGES FACED . . .	7.25	8.25	9.50	10.50	13.00	14.25	17.50	23.00	29.00	38.00	46.50	64.00	84.00	122.00	155.00	195.00
FLANGES FACED & DRILLED .	9.00	10.00	11.25	13.50	16.00	17.25	20.50	28.75	34.75	44.00	52.50	73.00	95.00	135.00	170.00	215.00

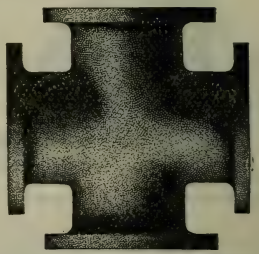
Flanged Fittings will always be furnished *faced only*, unless otherwise ordered. Template for drilling, see page 74.

EXTRA HEAVY CAST-IRON FITTINGS.

SUITABLE FOR A WORKING PRESSURE OF 250 POUNDS.



B-180. FLANGED REDUCING TEE.



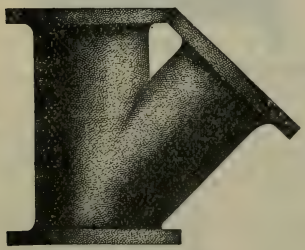
B-182. FLANGED CROSS.

REDUCING TEES.—B-180.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	10	12	14	16	18
DIAMETER OF FLANGES	7½	8½	9	10	10½	11	12½	14	15	17½	20	22½	25	27
WITH FLANGES FACED	8.25	9.50	11.00	12.00	15.00	16.25	20.00	26.50	33.50	53.50	74.00	96.00	140.00	178.00
WITH FLANGES FACED AND DRILLED . .	10.00	11.25	12.75	15.00	18.00	19.25	23.00	32.00	39.00	60.00	83.00	107.00	153.00	193.00

CROSSES.—B-182.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	10	12	14	16	18	20
DIAMETER OF FLANGES . . .	7½	8½	9	10	10½	11	12½	14	15	17½	20	22½	25	27	29½
WITH FLANGES FACED . . .	10.00	11.50	13.00	14.50	18.00	19 50	24.00	32.00	40.00	64.00	88.00	116.00	168.00	216.00	270.00
WITH FLANGES FACED & DRILLED	12.50	14.00	15.50	18.50	22.00	23.50	28.00	39.50	47.50	72.00	100.00	130.00	186.00	236.00	296.00



B-184. FLANGED Y BRANCH.



B-187. FLANGED TAPER REDUCER.

Y BRANCHES.—B-184.

SIZE . . . . . INCHES	2½	3	4	5	6	7	8	10	12	14	16	18
DIAMETER OF FLANGES	7½	8½	10	11	12½	14	15	17½	20	22½	25	27
WITH FLANGES FACED	10.00	11.50	14.50	19.50	24.00	32.00	40.00	64.00	88.00	116.00	168.00	216.00
WITH FLANGES FACED AND DRILLED . . .	12.50	14.00	18.50	23.50	28.00	39.50	47.50	72.00	100.00	130.00	186.00	236.00

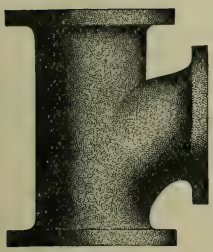
For Standard Flanged Fittings, see pages 58–61. Template for drilling, see page 74.

Flanged Fittings will always be furnished *faced only*, unless otherwise ordered.

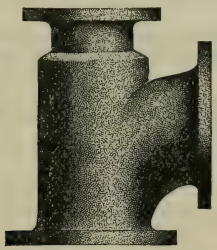
B-187. FLANGED TAPER REDUCERS.—On account of the variation in reductions and lengths of Taper Reducers, it is impossible to list the dimensions, sizes and prices. These will be furnished on application.

EXTRA HEAVY CAST-IRON FITTINGS.

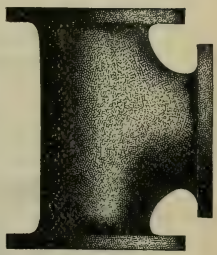
SUITABLE FOR A WORKING PRESSURE OF 250 POUNDS.



B-188.
FLANGED LONG TURN TEE.



B-190.
FLANGED LONG TURN REDUCING TEE.



B-194.
FLANGED LONG TURN DOUBLE SWEEP TEE.

LONG TURN TEES.—B-188.

SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	10	12	14	16	18	20
DIAMETER OF FLANGES	7½	8½	9	10	10½	11	12½	14	15	17½	20	22½	25	27	29½
WITH FLANGES FACED	8.25	9.50	11.00	12.00	15.00	16.25	20.00	26.50	33.50	53.50	74.00	96.00	140.00	178.00	225.00
WITH FLANGES FACED & DRILLED.	10.00	11.25	12.75	15.00	18.00	19.25	23.00	32.00	39.00	60.00	83.00	107.00	153.00	193.00	245.00

LONG TURN REDUCING TEES.—B-190.

SIZE. . . . . INCHES	2½	3	4	4½	5	6	7	8	10	12	14	16	18	20
WITH FLANGES FACED	9.50	11.00	13.75	17.25	18.75	23.00	30.00	38.50	61.50	85.00	110.00	160.00	205.00	258.00
WITH FLANGES FACED AND DRILLED . .	11.25	12.75	16.75	20.25	21.75	26.00	35.50	44.00	68.00	94.00	121.00	173.00	220.00	278.00

LONG TURN DOUBLE SWEEP TEES.—B-194.

SIZE . . . . . INCHES	2½	3	4	5	6	7	8	10	12	14	16	18
DIAMETER OF FLANGES	7½	8½	10	11	12½	14	15	17½	20	22½	25	27
WITH FLANGES FACED	8.25	9.50	12.00	16.25	20.00	26.50	33.50	53.50	74.00	96.00	140.00	178.00
WITH FLANGES FACED AND DRILLED . . .	10.00	11.25	15.00	19.25	23.00	32.00	39.00	60.00	83.00	107.00	153.00	193.00

LONG TURN DOUBLE SWEEP TEES, REDUCING.

SIZE . . . . . INCHES	2½	3	4	5	6	7	8	10	12	14	16	18
WITH FLANGES FACED	9.50	11.00	13.75	18.75	23.00	30.00	38.50	61.50	85.00	110.00	160.00	205.00
WITH FLANGES FACED AND DRILLED . . .	11.25	12.75	16.75	21.75	26.00	35.50	44.00	68.00	94.00	121.00	173.00	220.00

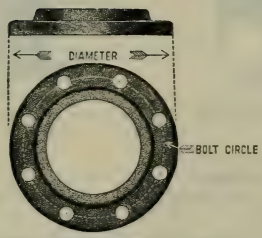
For Standard Flanged Fittings see pages 58 and 61. Template for drilling, see page 74.
Flanged Fittings will be furnished *faced only*, unless otherwise ordered.

EXTRA HEAVY CAST IRON FLANGES.

UNIVERSAL TEMPLATE.

ADOPTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS AND THE MASTER STEAM AND HOT WATER FITTERS' ASSOCIATION.

SUITABLE FOR A WORKING PRESSURE OF 250 POUNDS.



B-196. FLANGE FACED AND DRILLED.



B-198. BLIND FLANGE.

EXTRA HEAVY FLANGES.

TEMPLATE FOR DRILLING CLOW EXTRA HEAVY FLANGED FITTINGS AND VALVES AND PRICE LIST OF FLANGES TO MATCH.

PIPE SIZE . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
DIAMETER OF FLANGE . . . INCHES	6½	7½	8¼	9	10	10¼	11	12½	14	15
THICKNESS OF FLANGE . . . INCHES	7/8	1	1¼	1 3/16	1¼	1 5/16	1⅜	1 7/16	1½	1⅝
DIAMETER OF BOLT CIRCLE . . . INCHES	5	5⅞	6⅝	7¼	7⅞	8½	9¼	10⅝	11¼	13
NUMBER OF BOLTS . . .	4	4	8	8	8	8	8	12	12	12
SIZE OF BOLTS . . . INCHES	⅝	¾	⅝	⅝	¾	¾	¾	¾	⅞	⅞
FLANGES, FACED . . . EACH	1.20	1.40	1.60	1.80	2.15	2.50	2.80	3.20	4.35	5.00
FLANGES, FACED AND DRILLED . . . EACH	1.50	2.00	2.25	2.50	3.00	3.35	3.65	4.00	5.75	6.50

PIPE SIZE . . . INCHES	9	10	12	14	15	16	18	20	22	24
DIAMETER OF FLANGE . . . INCHES	16	17½	20	22½	23½	25	27	29½	31½	34
THICKNESS OF FLANGE . . . INCHES	1¾	1⅞	2	2 1/8	2 3/16	2¼	2⅜	2½	2⅝	2¾
DIAMETER OF BOLT CIRCLE . . . INCHES	14	15½	17¾	20	21	22½	24½	26¾	28¾	31¼
NUMBER OF BOLTS . . .	12	16	16	20	20	20	24	24	28	28
SIZE OF BOLTS . . . INCHES	⅞	1	⅞	⅞	1	1	1	1⅛	1⅛	1⅛
FLANGES, FACED . . . EACH	6.75	7.75	10.50	13.75	18.00	22.50	27.50	30.00	----	----
FLANGES, FACED AND DRILLED . . . EACH	8.25	9.25	12.50	16.00	21.00	26.00	31.00	34.00	----	----

Flanges, Flanged Fittings, Flanged Valves, etc., are drilled in multiples of four so that the Flanges may be made to face in any quarter with drilling straddle vertical axis.

Blind Flanges from 2 x 6½ to 16 x 24, inclusive, 25 per cent. net higher than above list.

For Machine Bolts see page 63.

LIST OF STANDARD SIZES OF CAST-IRON FITTINGS.

ADOPTED AT MEETING OF MAKERS OF CAST-IRON FITTINGS JUNE 24, 1897.

Sizes differing from Standard Sizes, if furnished, are to be charged at 5 per cent. gross discount higher than Standard Sizes.

STRAIGHT SIZES.

Elbows and Tees—$\frac{1}{4}$ to 12 inch. Elbows, 45°—$\frac{3}{8}$ to 12 inch. Return Bends—$\frac{3}{4}$ to 3 inch. Caps and Locknuts—2 to 12 inch.	Y Branches—$\frac{1}{2}$ to 10 inch. Elbows, Right and Left—$\frac{1}{4}$ to 3 inch. Crosses—$\frac{1}{2}$ to 12 inch.	Offsets—$\frac{3}{4}$ to 6 to offset 4 inch, 6 inch and 8 inch. Plugs—$\frac{1}{4}$ to 12 inch. Flange Unions—$\frac{1}{2}$ to 12 inch.

ELBOWS—REDUCING SIZES.

$\frac{1}{2}$ x $\frac{3}{8}$	$1\frac{1}{4}$ x $\frac{3}{4}$	2 x $1\frac{1}{2}$	3 x $2\frac{1}{2}$	4 x $2\frac{1}{2}$	8 x 6
$\frac{3}{4}$ x $\frac{1}{2}$	$1\frac{1}{4}$ x $\frac{1}{2}$	2 x $1\frac{1}{4}$	3 x 2	$4\frac{1}{2}$ x 4	----
1 x $\frac{3}{4}$	$1\frac{1}{2}$ x $1\frac{1}{4}$	2 x 1	$3\frac{1}{2}$ x 3	5 x 4	----
1 x $\frac{1}{2}$	$1\frac{1}{2}$ x 1	$2\frac{1}{2}$ x 2	4 x $3\frac{1}{2}$	6 x 5	----
$1\frac{1}{4}$ x 1	$1\frac{1}{2}$ x $\frac{3}{4}$	$2\frac{1}{2}$ x $1\frac{1}{2}$	4 x 3	6 x 4	----

REDUCING COUPLINGS.

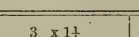
$2\frac{1}{2}$ x 2	$3\frac{1}{2}$ x 3	4 x $2\frac{1}{2}$	5 x 4	6 x 5	8 x 6
$2\frac{1}{2}$ x $1\frac{1}{2}$	$3\frac{1}{2}$ x $2\frac{1}{2}$	4 x 2	5 x 3	6 x 4	10 x 8
3 x $2\frac{1}{2}$	4 x $3\frac{1}{2}$	$4\frac{1}{2}$ x 4	-----	6 x 3	12 x 10
3 x 2	4 x 3	-----	-----	7 x 6	-----

TEES—BULL HEAD.

Tees with both ends of run the same size, with the outlet larger, thus:  are known as Bull Head, and are read, 1 x 2.

$\frac{3}{8}$ x $\frac{1}{2}$	$\frac{3}{4}$ x $1\frac{1}{4}$	$1\frac{1}{4}$ x 2	2 x $2\frac{1}{2}$	$3\frac{1}{2}$ x 4	6 x 7
$\frac{1}{2}$ x 1	$\frac{3}{4}$ x 1	$1\frac{1}{4}$ x $1\frac{1}{2}$	$2\frac{1}{2}$ x 4	4 x 6	----
$\frac{1}{2}$ x $\frac{3}{4}$	1 x 2	$1\frac{1}{2}$ x $2\frac{1}{2}$	$2\frac{1}{2}$ x 3	4 x 5	----
$\frac{3}{4}$ x 2	1 x $1\frac{1}{2}$	$1\frac{1}{2}$ x 2	3 x 4	5 x 6	----
$\frac{3}{4}$ x $1\frac{1}{2}$	1 x $1\frac{1}{4}$	2 x 3	3 x $3\frac{1}{2}$	6 x 8	----

TEES—REDUCING ON OUTLET.

Tees which reduce on the outlet, thus:  are read, 2 x $1\frac{1}{4}$.

$\frac{1}{2}$ x $\frac{3}{8}$	2 x $1\frac{1}{2}$	3 x $1\frac{1}{2}$	4 x $1\frac{1}{2}$	5 x 2	8 x 5
$\frac{3}{4}$ x $\frac{1}{2}$	2 x $1\frac{1}{4}$	3 x 1	4 x $1\frac{1}{4}$	5 x $1\frac{1}{2}$	8 x 4
$\frac{3}{4}$ x $\frac{3}{8}$	2 x 1	3 x $\frac{3}{4}$	4 x 1	5 x $1\frac{1}{4}$	8 x $3\frac{1}{2}$
1 x $\frac{3}{4}$	2 x $\frac{3}{4}$	$3\frac{1}{2}$ x 3	4 x $\frac{3}{4}$	6 x 5	8 x 3
1 x $\frac{1}{2}$	2 x $\frac{1}{2}$	$3\frac{1}{2}$ x $2\frac{1}{2}$	$4\frac{1}{2}$ x 4	6 x 4	8 x $2\frac{1}{2}$
1 x $\frac{3}{8}$	$2\frac{1}{2}$ x 2	$3\frac{1}{2}$ x 2	$4\frac{1}{2}$ x $3\frac{1}{2}$	6 x $3\frac{1}{2}$	8 x 2
$1\frac{1}{4}$ x 1	$2\frac{1}{2}$ x $1\frac{1}{2}$	$3\frac{1}{2}$ x $1\frac{1}{2}$	$4\frac{1}{2}$ x 3	6 x 3	10 x 8
$1\frac{1}{4}$ x $\frac{3}{4}$	$2\frac{1}{2}$ x $1\frac{1}{4}$	$3\frac{1}{2}$ x $1\frac{1}{4}$	$4\frac{1}{2}$ x $2\frac{1}{2}$	6 x $2\frac{1}{2}$	10 x 6
$1\frac{1}{4}$ x $\frac{1}{2}$	$2\frac{1}{2}$ x 1	$3\frac{1}{2}$ x 1	$4\frac{1}{2}$ x 2	6 x 2	10 x 5
$1\frac{1}{2}$ x $1\frac{1}{4}$	$2\frac{1}{2}$ x $\frac{3}{4}$	4 x $3\frac{1}{2}$	5 x 4	7 x 6	10 x 4
$1\frac{1}{2}$ x 1	3 x $2\frac{1}{2}$	4 x 3	5 x $3\frac{1}{2}$	7 x 5	12 x 10
$1\frac{1}{2}$ x $\frac{3}{4}$	3 x 2	4 x $2\frac{1}{2}$	5 x 3	7 x 4	12 x 8
$1\frac{1}{2}$ x $\frac{1}{2}$	3 x $1\frac{1}{2}$	4 x 2	5 x $2\frac{1}{2}$	8 x 6	12 x 6

LIST OF STANDARD SIZES OF CAST-IRON FITTINGS.

TEES—REDUCING ON RUN.

Tees reducing on run, thus:  are read, 2 x 1½ x 1¼

½ x ⅜ x ½	1¼ x ½ x 1¼	2 x 1¼ x 1¼	3 x 2½ x 1½	4 x 3 x 3½	5 x 3 x 2½
½ x ⅜ x ⅜	1½ x 1¼ x 2	2 x 1¼ x 1	3 x 2½ x 1½	4 x 3 x 3	5 x 3 x 2
¾ x ½ x 1	1½ x 1 x 2	2 x 1¼ x ¾	3 x 2½ x 1	4 x 3 x 2½	5 x 2½ x 5
¾ x ½ x ¾	1½ x ¾ x 2	2 x 1 x 2	3 x 2 x 3	4 x 3 x 2	5 x 2½ x 4
¾ x ½ x ½	1½ x 1¼ x 1½	2 x 1 x 1½	3 x 2 x 2½	4 x 3 x 1½	5 x 2½ x 3
¾ x ¾ x ¾	1½ x 1¼ x 1¼	2 x 1 x 1¼	3 x 2 x 2	4 x 3 x 1¼	5 x 2 x 5
¾ x ¾ x ⅜	1½ x 1¼ x 1	2 x 1 x 1	3 x 2 x 1½	4 x 3 x 1	6 x 5 x 6
1 x ¾ x 2	1½ x 1¼ x ¾	2 x 1 x ¾	3 x 2 x 1¼	4 x 3 x ¾	6 x 5 x 5
1 x ¾ x 1½	1½ x 1¼ x ½	2 x ¾ x 2	3 x 2 x 1	4 x 2½ x 4	6 x 4 x 6
1 x ¾ x 1¼	1½ x 1 x 1½	2 x ¾ x 1½	3 x 1½ x 3	4 x 2½ x 3	6 x 3 x 6
1 x ¾ x 1	1½ x 1 x 1¼	2 x ½ x 2	3 x 1½ x 2½	4 x 2½ x 2½	6 x 2½ x 6
1 x ¾ x ¾	1½ x 1 x 1	2½ x 2 x 3	3 x 1½ x 2	4 x 2½ x 2	7 x 6 x 7
1 x ¾ x ½	1½ x 1 x ¾	2½ x 2 x 2½	3 x 1¼ x 3	4 x 2½ x 1½	7 x 6 x 6
1 x ½ x 1	1½ x 1 x ½	2½ x 2 x 2	3 x 1 x 3	4 x 2 x 4	7 x 6 x 5
1 x ½ x ¾	1½ x ¾ x 1½	2½ x 2 x 1½	3½ x 3 x 3	4 x 2 x 3	7 x 5 x 5
1 x ½ x ½	1½ x ¾ x 1¼	2½ x 2 x 1¼	3½ x 3 x 2½	4 x 2 x 2½	8 x 7 x 6
1 x ⅜ x 1	1½ x ¾ x 1	2½ x 2 x 1	3½ x 3 x 2	4 x 2 x 2	8 x 6 x 8
1¼ x 1 x 2	1½ x ½ x 2½	2½ x 1½ x 2½	3½ x 3 x 1½	4 x 2 x 1½	8 x 6 x 7
1¼ x 1 x 1½	1½ x ½ x 1½	2½ x 1½ x 2	3½ x 2½ x 3	4 x 1½ x 4	8 x 6 x 6
1¼ x 1 x 1¼	1½ x ½ x 1¼	2½ x 1½ x 1½	3½ x 2½ x 2½	4 x 1¼ x 4	8 x 5 x 8
1¼ x 1 x 1	2 x 1½ x 2½	2½ x 1¼ x 1¼	3½ x 2½ x 2	4 x 1 x 4	8 x 5 x 5
1½ x 1 x ¾	2 x 1½ x 2	2½ x 1½ x 1	3½ x 2 x 3½	5 x 4 x 5	8 x 4 x 8
1½ x 1 x ½	2 x 1½ x 1½	2½ x 1¼ x 2½	3½ x 1½ x 3½	5 x 4 x 4	10 x 8 x 8
1¼ x ¾ x 2	2 x 1½ x 1¼	2½ x 1¼ x 2	3½ x 1¼ x 3½	5 x 4 x 3	12 x 8 x 10
1¼ x ¾ x 1½	2 x 1½ x 1	2½ x 1 x 2½	3½ x 1 x 3½	5 x 4 x 2½	12 x 8 x 8
1¼ x ¾ x 1¼	2 x 1¼ x ¾	2½ x ¾ x 2½	4 x 3½ x 3½	5 x 4 x 2	------
1¼ x ¾ x 1	2 x 1¼ x ½	3 x 2½ x 3	4 x 3½ x 3	5 x 3 x 5	------
1¼ x ½ x ¾	2 x 1¼ x ¾	3 x 2½ x 2½	4 x 3½ x 2½	5 x 3 x 4	------
1¼ x ½ x 1½	2 x 1¼ x 1½	3 x 2½ x 2	4 x 3 x 4	5 x 3 x 3	------

CROSSES—REDUCING SIZES.

The outlets of a Cross are always the same size, and are indicated by the last figure. Thus: A Cross ¾  ¾ is called a ¾ x ½ Cross.

A Cross reducing on the run, thus: 1½  1¼ is called a 1½ x 1¼ x 1 Cross.

½ x ⅜	1¼ x ¾	2 x 1¼	2½ x ¾	3½ x 3	5 x 4	6 x 3	10 x 8
½ x ½	1¼ x ½	2 x 1	3 x 2½	3½ x 2½	5 x 3	6 x 2½	10 x 7
¾ x ⅜	1½ x 1¼	2 x ¾	3 x 2	3½ x 2	5 x 2½	6 x 2	12 x 10
¾ x ½	1½ x 1	2½ x 2	3 x 1½	4 x 3½	5 x 2	7 x 6	12 x 8
1 x ¾	1½ x ¾	2½ x 1½	3 x 1¼	4 x 3	6 x 5	7 x 5	------
1 x ½	1½ x ½	2½ x 1¼	3 x 1	4 x 2½	6 x 4	8 x 7	------
1¼ x 1	2 x 1½	2½ x 1	3 x ¾	4 x 2	6 x 3½	8 x 6	------

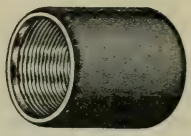
BUSHINGS.

[NOTE.—Bushings reducing one size only, up to and including 2½ inches are malleable, and will be found, therefore, listed among the malleable fittings.]

½ x ¼	1½ x ¾	3 x 2½	3½ x 1	4½ x 3	6 x 4	7 x 3	9 x 6
¾ x ⅜	1½ x ½	3 x 2	4 x 3½	4½ x 2½	6 x 3½	7 x 2½	10 x 8
¾ x ½	2 x 1¼	3 x 1½	4 x 3	5 x 4½	6 x 3	7 x 2	10 x 6
1 x ½	2 x 1	3 x 1¼	4 x 2½	5 x 4	6 x 2½	8 x 7	12 x 10
1 x ¾	2 x ¾	3 x 1	4 x 2	5 x 3½	6 x 2	8 x 6	12 x 8
1 x 1	2 x ½	3½ x 3	4 x 1½	5 x 3	7 x 6	8 x 5	12 x 6
1¼ x ¾	2½ x 1½	3½ x 2½	4 x 1¼	5 x 2½	7 x 5	8 x 4	------
1¼ x ½	2½ x 1¼	3½ x 2	4 x 1	5 x 2	7 x 4½	8 x 3	------
1¼ x ⅜	2½ x 1	3½ x 1½	4½ x 4	6 x 5	7 x 4	9 x 8	------
1½ x 1	2½ x ¾	3½ x 1¼	4½ x 3½	6 x 4½	7 x 3½	9 x 7	------



B-201. WROUGHT-IRON COUPLING.



B-204. RECESSED COUPLING.

WROUGHT-IRON COUPLINGS.—B-201.

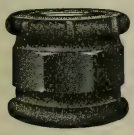
SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PLAIN . . . . . EACH	.05	.05	.06	.07	.10	.13	.17	.21	.28	.40	.60
GALVANIZED . . . . EACH	.06	.06	.08	.10	.13	.18	.25	.32	.40	.55	.80

SIZE . . . . . INCHES	3½	4	4½	5	6	7	8	9	10	12	14
PLAIN . . . . . EACH	.80	1.00	1.50	1.65	2.40	3.25	4.25	5.50	7.50	10.00	13.00
GALVANIZED . . . . EACH	1.05	1.40	2.00	2.25	3.25	----	----	----	----	-----	-----

RECESSED COUPLINGS.—B-204.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4
PLAIN . . . . . EACH	.24	.28	.33	.40	.50	.65	.85	1.30	1.65	2.05
GALVANIZED . . . . . EACH	.28	.33	.38	.50	.65	.85	1.10	1.60	1.95	2.45

Our Recessed Couplings are made extra heavy and longer than the common couplings.



B-205. PATENTED RIGHT AND LEFT COUPLING.



B-207. SADDLE FOR STEAM PIPE.

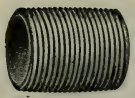
CAST IRON PATENTED RIGHT AND LEFT COUPLINGS.—B-205.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PLAIN . . . . . EACH	.07	.08	.11	.15	.20	.25	.30	.50	.85	1.20
GALVANIZED . . . . . EACH	.14	.16	.22	.30	.40	.50	.60	1.00	1.70	2.40

MALLEABLE SADDLES FOR STEAM PIPE.—B-207.

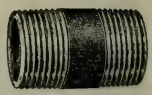
SIZE FOR PIPE . . . INCHES	2	2½	3	4	5	6	6	8	8	10	10	12	12
TAPPED FOR PIPE . INCHES	1 to 1½	1 to 1½	1 to 2	1 to 2	1 to 2	1 to 2	2½ to 4	1 to 2	2½ to 4	1 to 2	2½ to 4	1 to 2	2½ to 4
EACH	1.00	1.25	1.25	1.50	2.75	2.75	5.75	4.50	6.50	5.50	6.75	6.25	8.75

NIPPLES.



B-211. CLOSE NIPPLE.

WROUGHT IRON.
THREADED RIGHT HAND.



B-212. SHOULDER NIPPLE.

TABLE OF SIZES AND LENGTHS KEPT IN STOCK.

LENGTH, INCHES.					SIZE.	PRICES.		PRICE OF EXTRA LONG NIPPLES.								
Close.	Short.	Long.			Inches.	Close or Short.	Long.	Inches.								
								4	5	6	7	8	9	10	11	12
1/4	1 1/2	2	2 1/2	3	3 1/2	1/8	.04	.06	.07	.08	.10	.12	.14	.15	.17	.18	.19
1/4	1 1/2	2	2 1/2	3	3 1/2	1/4	.04	.06	.07	.08	.10	.12	.14	.15	.17	.18	.19
1	1 1/2	2	2 1/2	3	3 1/2	3/8	.04	.06	.07	.08	.10	.12	.14	.15	.17	.18	.19
1 1/8	1 1/2	2	2 1/2	3	3 1/2	1/2	.05	.07	.08	.10	.12	.14	.16	.18	.20	.22	.23
1 1/8	2	2 1/2	3	3 1/2	4	3/4	.06	.09	----	.11	.13	.17	.18	.20	.22	.24	.26
1 1/2	2	2 1/2	3	3 1/2	4	1	.08	.13	----	.15	.18	.23	.25	.28	.31	.34	.36
1 5/8	2 1/2	3	3 1/2	4	4 1/2	1 1/4	.11	.17	----	.20	.24	.29	.33	.36	.40	.44	.47
1 3/4	2 1/2	3	3 1/2	4	4 1/2	1 1/2	.13	.20	----	.25	.29	.36	.40	.45	.50	.54	.59
2	2 1/2	3	3 1/2	4	4 1/2	2	.18	.27	----	.32	.38	.50	.54	.59	.65	.72	.77
2 1/4	3	3 1/2	4	4 1/2	5	2 1/2	.39	.59	----	----	.68	.90	.97	1.06	1.17	1.26	1.35
2 1/2	3	3 1/2	4	4 1/2	5	3	.48	.72	----	----	.85	1.08	1.20	1.33	1.45	1.58	1.70
2 3/4	4	4 1/2	5	5 1/2	6	3 1/2	.75	1.05	----	----	----	1.30	1.45	1.60	1.75	1.90	2.05
3	4	4 1/2	5	5 1/2	6	4	.85	1.20	----	----	----	1.52	1.69	1.87	2.05	2.22	2.40
3	4	4 1/2	5	5 1/2	6	4 1/2	1.25	1.70	----	----	----	2.25	2.50	2.75	2.95	3.17	3.40
3 1/2	4 1/2	5	5 1/2	6	6 1/2	5	1.55	2.45	----	----	----	2.58	2.83	3.10	3.35	3.60	3.85
3 1/2	4 1/2	5	5 1/2	6	6 1/2	6	1.85	2.90	----	----	----	3.05	3.35	3.70	4.00	4.30	4.65
4	5	6	---	---	---	7	3.20	3.60	----	----	----	4.05	4.45	4.90	5.30	5.75	6.15
4	5	6	---	---	---	8	3.55	4.05	----	----	----	4.55	5.05	5.50	6.00	6.50	7.00
5	6	8	---	---	---	9	5.25	6.50	----	----	----	----	----	7.10	7.75	8.40	9.00
5	6	8	---	---	---	10	6.75	8.25	----	----	----	----	----	8.90	9.70	10.40	11.15
5	6	8	---	---	---	12	8.00	10.00	----	----	----	----	----	10.80	11.75	12.70	13.65

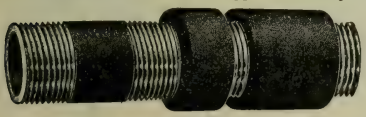
GALVANIZED NIPPLES.

LENGTH, INCHES.					SIZE.	PRICES.		PRICE OF EXTRA LONG NIPPLES.								
Close.	Short	Long.			Inches.	Close or Short.	Long.	Inches.								
								4	5	6	7	8	9	10	11	12
1/4	1 1/2	2	2 1/2	3	3 1/2	1/8	.06	.11	.12	.15	.17	.21	.24	.26	.29	.31	.34
1/4	1 1/2	2	2 1/2	3	3 1/2	1/4	.06	.11	.12	.15	.17	.21	.24	.26	.29	.31	.34
1	1 1/2	2	2 1/2	3	3 1/2	3/8	.06	.11	.12	.15	.17	.21	.24	.26	.29	.31	.34
1 1/8	1 1/2	2	2 1/2	3	3 1/2	1/2	.06	.11	.13	.16	.18	.23	.26	.28	.31	.33	.36
1 1/8	2	2 1/2	3	3 1/2	4	3/4	.08	.14	----	.18	.21	.26	.29	.32	.35	.38	.41
1 1/2	2	2 1/2	3	3 1/2	4	1	.11	.19	----	.24	.28	.34	.38	.42	.47	.51	.55
1 5/8	2 1/2	3	3 1/2	4	4 1/2	1 1/4	.17	.29	----	.32	.38	.45	.51	.57	.63	.69	.75
1 3/4	2 1/2	3	3 1/2	4	4 1/2	1 1/2	.21	.35	----	.39	.46	.55	.63	.70	.77	.84	.91
2	2 1/2	3	3 1/2	4	4 1/2	2	.27	.47	----	.52	.61	.74	.83	.93	1.03	1.13	1.23
2 1/4	3	3 1/2	4	4 1/2	5	2 1/2	.56	.86	----	----	1.00	1.26	1.41	1.56	1.71	1.86	2.01
2 1/2	3	3 1/2	4	4 1/2	5	3	.70	1.10	----	----	1.30	1.60	1.80	2.00	2.20	2.40	2.60
2 3/4	4	4 1/2	5	5 1/2	6	3 1/2	1.20	1.70	----	----	----	2.10	2.35	2.60	2.85	3.15	3.40
3	4	4 1/2	5	5 1/2	6	4	1.35	1.87	----	----	----	2.30	2.60	2.90	3.20	3.50	3.80
3	4	4 1/2	5	5 1/2	6	4 1/2	1.85	2.60	----	----	----	3.30	3.65	4.05	4.45	4.85	5.25
3 1/2	4 1/2	5	5 1/2	6	6 1/2	5	2.30	3.15	----	----	----	3.75	4.20	4.60	5.00	5.40	5.85
3 1/2	4 1/2	5	5 1/2	6	6 1/2	6	2.80	4.25	----	----	----	4.50	5.00	5.55	6.05	6.60	7.15
4	5	6	---	---	---	7	4.25	4.95	----	----	----	5.65	6.35	7.05	7.75	8.45	9.20
4	5	6	---	---	---	8	5.00	5.80	----	----	----	6.65	7.50	8.35	9.25	10.10	10.95

RIGHT AND LEFT NIPPLES.

LENGTH, INCHES.						SIZE.	PRICES.		PRICE OF EXTRA LONG NIPPLES.								
Close.	Short.	Long.				Inches.	Close or Short.	Long.	Inches.								
									4	5	6	7	8	9	10	11	12
¾	1½	2	2½	3	3½	⅛	.05	.08	.09	.11	.13	.16	.18	20	.23	.25	.27
⅞	1½	2	2½	3	3½	¼	.05	08	.09	.11	.13	.16	.18	.20	.23	.25	.27
1	1½	2	2½	3	3½	⅜	.05	.08	.09	.11	.13	.16	.18	.20	.23	.25	.27
1⅛	1½	2	2½	3	3½	½	.07	.10	.11	.13	.16	.18	.21	.24	.27	.29	.31
1⅜	2	2½	3	3½	4	¾	.08	.12	....	.15	.17	.23	.25	.27	.29	.32	.35
1½	2	2½	3	3½	4	1	.11	.18	....	.20	.24	.31	.33	.37	.41	.45	.48
1⅝	2½	3	3½	4	4½	1¼	15	.23	....	.27	.32	.39	.45	.50	.55	.60	.65
1¾	2½	3	3½	4	4½	1½	.18	.27	....	.34	.39	.48	.52	.60	.67	.72	.80
2	2½	3	3½	4	4½	2	24	.36	....	.43	.51	.67	.72	.80	.87	.96	1.03
2½	3	3½	4	4½	5	2½	.52	.79	....	....	.91	1.20	1.30	1.40	1.55	1.68	1.80
2½	3	3½	4	4½	5	3	.65	.96	....	....	1.13	1.44	1.60	1.77	1.93	2.10	2.27
2¾	4	4½	5	5½	6	3½	1.00	1.40	....	....	....	1.75	1.95	2.15	2.35	2.55	2.75
3	4	4½	5	5½	6	4	1.15	1.60	....	....	....	2.00	2.25	2.50	2.75	3.00	3.25

Add 60 per cent. to above prices for Galvanized Nipples, Threaded Right and Left.
Nipples made to order from extra heavy pipe at double regular list.
Assorted close and short Nipples will always be sent unless otherwise ordered.



B-214. LONG SCREWS WITH COUPLING AND LOCKNUT FACED.



B-218. *AMERICAN LONG SCREW.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
B-214. STANDARD LENGTH . . . . . INCHES	2½	3	3½	4	4½	5	5½	6	7	8
PLAIN . . . . . EACH	.30	.35	.40	.55	.75	1.00	1.30	1.70	2.70	3.70
GALVANIZED . . . . . EACH	.35	.40	.50	66	1.00	1.25	1.60	2.10	3.10	4.70
B-218. PLAIN . . . . . EACH	....	....	.45	.55	.75	1.00	1.50	2.00	3.37	4.50
B-218. GALVANIZED . . . . . EACH	....	....	.60	.75	1.00	1.35	2.00	2.70	4.50	6.00

*B-218 requires no packing and makes a perfect joint that will not leak.
Long Screws, longer than standard, made to order and charged as cut pipe. Extra for threads, couplings, and locknuts.
Long Screws made to order from extra heavy pipe. Locknut Nipples made to order and charged as cut pipe, threads extra.

STANDARD THREADS FOR WROUGHT-IRON PIPE.

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½
EACH	.05	.05	.05	05	.05	.06	.07	.08	.10	.15	.20	.25
SIZE . . . . . INCHES	4	4½	5	6	7	8	9	10	12	14	15	....
EACH	.35	.45	.55	.70	.85	1.00	1.25	1.50	2.50	3.50	5.00	....

LOCKNUT THREADS.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
EACH	.10	.10	.10	.10	.12	.14	.16	.20	.30	.40

BRANCH TEES.



B-220. FOR CIRCULATION.



B-222. FOR CIRCULATION.



B-224. FOR BOX COILS.

BRANCHES ONE INCH. 2½ INCHES CENTER TO CENTER.

NUMBER OF BRANCHES	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
WITH 1 OR 1¼-INCH RUN	.90	1.05	1.15	1.35	1.60	1.90	2.20	2.65	3.15	3.75	4.40	5.00	----	----	----
WITH 1½-INCH RUN	1.00	1.15	1.30	1.45	1.75	2.20	2.45	2.90	3.30	4.50	4.75	5.50	7.00	7.50	8.00
WITH 2-INCH RUN	1.15	1.35	1.60	1.85	2.10	2.45	2.75	3.40	4.00	4.80	5.10	6.00	7.25	7.75	8.25

BRANCHES ONE AND ONE-QUARTER INCH. 3 INCHES CENTER TO CENTER.

NUMBER OF BRANCHES	2	3	4	5	6	7	8	9	10	11	12	13
WITH 1¼ OR 1½-INCH RUN	1.30	1.65	2.00	2.40	2.80	3.20	3.60	4.30	4.80	5.00	5.25	6.00
WITH 2-INCH RUN	1.50	1.90	2.40	2.90	3.30	3.90	4.50	5.25	5.85	6.25	6.50	7.00
WITH 2½-INCH RUN	1.95	2.40	2.85	3.55	3.95	4.20	4.95	6.15	6.85	7.25	7.65	8.25

BRANCHES ONE AND ONE-HALF INCH. 3½ INCHES CENTER TO CENTER.

NUMBER OF BRANCHES	2	3	4	5	6	7	8	9	10	11	12	13
WITH 1½ OR 2-INCH RUN	2.10	2.70	3.35	4.00	4.65	5.25	5.85	6.50	7.60	8.00	8.50	9.50
WITH 2½-INCH RUN	2.85	3.45	4.15	5.00	5.75	6.50	7.00	8.25	9.25	9.75	10.50	11.50
WITH 3-INCH RUN	3.15	3.80	4.60	5.50	6.25	7.25	7.75	9.00	10.00	10.75	11.50	12.75

BRANCHES TWO INCH. 4½ INCHES CENTER TO CENTER.

NUMBER OF BRANCHES	2	3	4	5	6	7	8	9	10	11	12	13
WITH 2-INCH RUN	4.10	5.25	6.40	7.65	8.80	10.60	11.50	12.25	13.50	14.25	15.00	16.00
WITH 2½ OR 3-INCH RUN	4.50	5.75	7.00	8.50	9.75	11.75	12.75	13.50	15.00	15.75	16.50	17.50
WITH 3½-INCH RUN	5.00	6.25	7.75	9.25	10.75	13.00	14.00	15.00	16.50	-----	-----	-----

Back or Side Outlets charged as additional front outlets.
All openings in Branch Tees for Circulation are tapped Right hand.
Branch Tees for Box Coils are always tapped Left hand in branches and Right hand in back inlet.
The run and back opening of Branch Tees are tapped the same size as branches unless otherwise ordered.

HOOK PLATES.



B-500. HOOK PLATE.



B-502. SINGLE HOOK PLATE.



B-504. EXPANSION HOOK PLATE.

HOOK PLATES.—B-500 and B-502.

NUMBER OF HOOKS	1	2	3	4	5	6	7	8	10	12
FOR 1 IN. PIPE, 2½ IN. CENTER TO CENTER	.09	.18	.23	.26	.32	.38	.48	.59	.70	1.00
FOR 1¼ IN. PIPE, 3 IN. CENTER TO CENTER	.10	.21	.27	.32	.41	.52	.68	.80	1.20	1.40
FOR 1½ IN. PIPE, 3½ IN. CENTER TO CENTER	.15	.28	.43	.58	.72	.88	1.10	1.25	1.55	1.90
FOR 2 IN. PIPE, 4½ IN. CENTER TO CENTER	.22	.43	.65	.90	1.15	1.35	----	----	----	----

EXPANSION HOOK PLATES.—B-504.

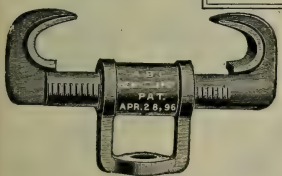
NUMBER OF HOOKS	1	2	3	4	5	6	7	8	10	12
FOR 1 IN. PIPE, 2½ IN. CENTER TO CENTER	.15	.25	.35	.50	.60	.70	.80	.95	1.35	1.70
FOR 1¼ IN. PIPE, 3 IN. CENTER TO CENTER	.17	.27	.40	.60	.70	.80	.90	1.15	1.50	2.00
FOR 1½ IN. PIPE, 3½ IN. CENTER TO CENTER	.25	.40	.60	.75	.90	1.00	----	----	----	----



B-506. BEAM HOOK.

BEAM HOOKS.—B-506.

SIZE INCHES	½	¾	1	1¼	1½	2	2½	3
EACH	.13	.15	.18	.22	.24	.35	.65	.90

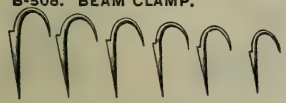


B-508. BEAM CLAMP.

ADJUSTABLE BEAM CLAMPS.—B-508.

PRICE EACH	.50

These Beam Clamps are made of Malleable Iron. They will fit Beam Flanges of any width from 3 inches to 7 inches.



B-510. GAS HOOKS.



B-512. TINNED STRAPS.

GAS HOOKS.—B-510.

SIZE INCHES	¼	⅜	½	¾	1	1¼	1½	2
PER 100	.45	.55	.65	.80	1.00	1.30	1.60	2.00

TINNED STRAPS.—B-512.

TINNED STRAPS, ¼, ⅜, ½, ¾, 1, 1¼, 1½ AND 2-INCH. PER POUND	.15



B-520.



B-522.



B-522. SECTIONAL VIEW.



B-523.

EXPANSION PIPE HANGERS, OR RING HOOKS.—B-520.

SIZE — INCHES	⅜	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8
COMPLETE — EACH	.17	.18	.19	.25	29	.36	.44	.55	.63	.90	1.12	1.35	1.80	2.25
SIZE OF PIPE, RINGS AND BUTTONS ARE TAPPED FOR — INCHES	⅜	⅜	⅜	⅜	⅜	½	½	½	½	½	½	½	½	½
PLATES — EACH	.08	.08	.08	.09	.09	.10	.10	.10	.10	.10	.10	.10	.10	.10
BUTTONS (EXTRA PARTS) — EACH	.06	.06	.06	.07	.07	.08	.08	.08	.08	.08	.08	.08	.08	.08
RINGS (EXTRA PARTS) — EACH	.08	.12	.15	.20	.25	.30	.40	.50	.60	.80	1.00	1.25	1.70	2.15

EUREKA PATENT ADJUSTABLE PIPE HANGER.—B-522.

THREADS IN NUTS STANDARD PIPE THREAD.

SIZE — INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	7	8
MALLEABLE IRON — EACH	.15	.18	.18	.20	.25	.28	33	.38	.45	.55	.65	.75	1.15	1.25

CAST-IRON CLAMPS FOR GIRDERS.—AS SHOWN IN B-523.

WIDTH OF BEAM FLANGES — INCHES	3	3½	4	4½	5	6
CLAMPS ONLY — EACH	.40	.40	.60	.60	.60	.60



B-525.



B-526.



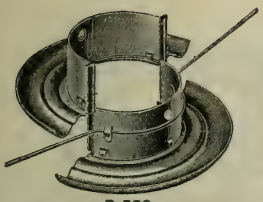
B-527.



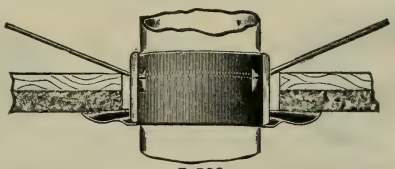
B-528.

GALVANIZED MALLEABLE IRON AND BRASS PIPE HANGERS.

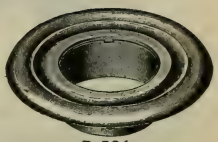
SIZE — INCHES	⅜	½	¾	1	1¼	1½	2
B-525. MALLEABLE — EACH	-----	.07	.07	.08	.09	.12	.16
B-526. MALLEABLE — EACH	-----	.13	.14	.16	-----	-----	-----
B-527. MALLEABLE — EACH	-----	.17	.20	.25	.30	.40	.50
B-528. MALLEABLE — EACH	-----	.17	.20	.25	.30	.40	.50
B-527. POLISHED BRASS — EACH	.50	.50	.60	.75	-----	-----	-----
B-528. POLISHED BRASS — EACH	.34	.34	.36	.40	.55	.80	1.10



B-532.
PERFECTION CEILING PLATE.
PATENTED NOV. 3, 1896; JUNE 14, 1898.



B-532.
SECTIONAL VIEW.



B-534.
WHOLE FLOOR PLATE.
PATENT PENDING.

PERFECTION CEILING AND FLOOR PLATES.—B-532 and B-534.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
B-532. CEILING PLATE, NICKEL PLATED . . . . . EACH	.25	.28	.32	.35	.38	.52	.75
B-534. FLOOR PLATE, NICKEL PLATED . . . . . EACH	.10	.11	.12	.13	.15	.30	.50

Send for special descriptive circular.



B-536. ADJUSTABLE PIPE THIMBLE.



B-536. SECTIONAL VIEW.

CLOW ADJUSTABLE PIPE THIMBLE.—B-536.

I. P. SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
NO. 1. GALVANIZED . . . . . EACH	.50	.60	.80	1.00	1.20	1.40	1.65	----	----	----	----	----
NO. 1. NICKEL PLATED . . . EACH	.90	1.00	1.30	1.60	1.90	2.20	2.75	----	----	----	----	----
NO. 2. GALVANIZED . . . . . EACH	.60	.70	.90	1.10	1.30	1.55	1.80	2.15	3.00	4.50	5.00	6.50
NO. 2. NICKEL PLATED . . . EACH	1.00	1.10	1.40	1.70	2.00	2.35	2.90	3.35	4.40	6.00	6.60	8.30

DIMENSIONS: No. 1, Minimum length 9 in., maximum length 16 in.; No. 2, minimum 15 in., maximum 22 in. The Clow Adjustable Pipe Thimble holds the flanges in close contact with ceiling and floor, and will remain in position where placed.



B-538.
CEILING PLATES IN HALVES.



B-539.
CEILING PLATES IN ONE PIECE.



B-540.
FLOOR PLATES.

CAST-IRON CEILING PLATES IN HALVES.—B-538.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4
EACH	.22	.28	.32	.40	.50	.65	.90	1.00	1.20

CAST-IRON CEILING PLATES IN ONE PIECE.—B-539.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4
EACH	.13	.16	.18	.23	.27	.36	.50	.55	.68

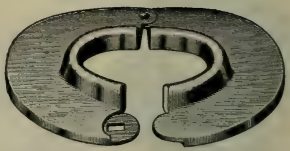
CAST-IRON FLOOR PLATES.—B-540.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
EACH	.06	.06	.08	.11	.14	.16	.24	.30

This Floor Plate is made with grooves on the under side of the flange, as shown in cut, in order that it may be easily parted by a slight blow when required to be used in halves.



B-542. ADJUSTABLE CEILING PLATE.



B-543. ADJUSTABLE FLOOR PLATE.

CAST-IRON ADJUSTABLE FLOOR AND CEILING PLATES.—B-542 and B-543.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
PLAIN. . . . . EACH	.14	.14	.18	.20	.24	.28	.43	.60	.90	1.25	1.60	2.00
NICKEL PLATED . . . . . EACH	.25	.25	.28	.32	.35	.38	.52	.75	1.10	1.50	2.00	2.50

The Nickel Plated Plates are packed one dozen in a box.



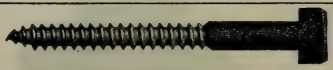
B-545. STAMPED PLATE.



B-546. STAMPED ADJUSTABLE PLATE.

STAMPED BRASS FLOOR AND CEILING PLATES.—B-545 and B-546.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3
B-545. NICKEL PLATED . . . . . EACH	----	----	.10	.11	.12	.13	.15	----	----
B-546. ADJUSTABLE, NICKEL PLATED . . . . . EACH	.25	.25	.25	.28	.32	.35	.38	.52	.75



B-548. LAG SCREW.

LIST ADOPTED JAN. 30, 1895.



B-549. LAG SCREW HOOK.



B-550. LAG SCREW END.

AG SCREWS WITH SQUARE HEADS.—B-548, B-549 and B-550.

PRICES PER HUNDRED.

DIAMETER	⅜	7/16	½	9/16 & ⅝	¾	⅞	1
Length in Inches.							
2½	3.22	3.79	4.47	5.50	7.90	-----	------
3	3.48	4.11	4.83	6.00	8.60	12.50	------
3½	3.74	4.43	5.19	6.50	9.30	13.50	18.20
4	4.00	4.75	5.55	7.00	10.00	15.50	19.50
5	4.52	5.39	6.27	8.00	11.40	16.50	22.10
6	5.04	6.03	6.99	9.00	12.80	18.50	24.70
7	5.56	6.67	7.71	10.00	14.20	20.50	27.30
8	6.08	7.31	8.43	11.00	15.60	22.50	29.90
9	6.60	7.95	9.15	12.00	17.00	24.50	32.50
10	7.12	8.59	9.87	13.00	18.40	26.50	35.10
12	8.16	9.87	11.31	15.00	21.20	30.50	40.30

Lag Screw Hooks, B-549, 25 per cent extra. Lag Screw Ends, B-550, 25 per cent extra.
Lag Screw Wrenches, see page 370.

CAST-IRON DRAINAGE FITTINGS.

SCREWED FOR IRON PIPE.

The necessity for better and safer House Drainage has induced Sanitary Engineers to recommend and adopt Wrought-Iron Screwed-Jointed Pipes in place of the ordinary Cast-Iron Lead-Jointed Soil Pipes, preventing thereby accumulation of Sewer Gas in houses, caused by leaky lead joints.

We manufacture Drainage Fittings which are specially adapted to the new system of House Drainage.

These Fittings have an interior shoulder, and are made with same inside capacity as the inside diameter of the Pipe, thus securing an unobstructive interior surface, allowing all solid matters to pass without choking up the Pipes.

The Fittings are coated with heated Asphaltum.



B-560. LONG TURN ELBOW.



B-562. ELBOW.



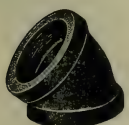
B-564. LONG TURN ELBOW, 45°.



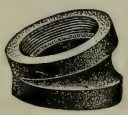
B-568. ELBOW, 60°.

LONG AND SHORT TURN ELBOWS. B-560, B-562, B-564 and B-568.

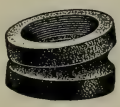
SIZE . . . . . INCHES	1¼	1½	2	2½	3	4	5	6	7	8	10
LONG TURN ELBOWS . . . . . EACH	---	.60	.70	1.10	1.30	2.00	3.60	5.20	8.50	10.00	12.00
SHORT TURN ELBOWS . . . . . EACH	.45	.50	.60	.90	1.10	1.70	2.60	3.50	6.00	7.00	9.00
LONG TURN ELBOWS, 45°, ⅛-BEND . . EACH	---	---	---	---	1.45	2.25	4.00	5.75	9.50	11.00	13.50
SHORT TURN ELBOWS, 60°, ⅛-BEND . EACH	---	.50	.60	---	1.10	1.70	2.60	3.50	6.00	7.00	9.00



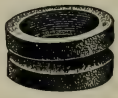
B-570. 45° BEND.



B-572. 22 1-2° BEND.



B-574. 11 1-4° BEND.



B-576. 5 5-8° BEND.

SHORT TURN BENDS.—B-570, B-572, B-574 and B-576.

SIZE . . . . . INCHES	1¼	1½	2	2½	3	4	5	6	7	8	10
EACH	.45	.50	.60	.90	1.10	1.70	2.60	3.50	6.00	7.00	9.00

Sizes differing from above can be furnished, but will be charged extra. Galvanized Drainage Fittings double above list.

CAST-IRON DRAINAGE FITTINGS.



B-578. 45° Y.



B-580. 45° REDUCING Y.



B-582. 45° DOUBLE Y.



B-584. 60° Y.

Y BRANCHES, STRAIGHT SIZES.

SIZE . . . . . INCHES	1½	2	2½	3	4	5	6	7	8	10
B-578. 45° Y BRANCHES . . . . . EACH	.80	1.00	1.50	1.70	2.60	3.50	5.50	12.00	15.00	21.00
B-582. 45° DOUBLE Y BRANCHES . . . EACH	1.00	1.30	1.75	2.20	3.10	4.25	6.50	15.00	18.00	25.00

REDUCING Y BRANCHES.

SIZE . . . INCHES	2x1½	2½x1½	2½x2	3x1½	3x2	4x1½	4x2	4x3	5x2	5x3	5x4	6x2	6x3	6x4	6x5	8x4	8x6
B-580. . . . EACH	1.00	1.50	1.50	1.70	1.70	2.60	2.60	2.60	3.50	3.50	3.50	5.50	5.50	5.50	5.50	15.00	15.00
B-582 . . . EACH	1.30	1.75	1.75	2.20	2.20	....	3.10	....	4.25	....	....	6.50	.....	....	....	18.00	18.00
B-584 . . . EACH	1.00	....	....	....	1.70	....	2.60	2.60	4.50	4.50	4.50	7.00	.....	7.00	7.00	15.00	15.00



B-586. 3-WAY ELBOW.



B-588. Y BRANCH, T PATTERN.



B-590. CROSS.

ELBOWS AND CROSSES.—B-586 and B-590.

SIZE . . . . . INCHES	1½	2	3	3x2	4	4x2	5	5x4	6	6x5
3-WAY ELBOWS . . . . . EACH	1.00	1.30	2.20	....	3.10	....	4.25	....	6.50	....
CROSSES . . . . . EACH	1.25	1.50	3.00	3.00	4.00	4.00	6.50	6.50	8.50	8.50

Y BRANCHES, T PATTERN, 90°.—B-588.

SIZE . INCHES	1	1½	1½x1½	2	2x1½	2½	2½x1½	2½x2	3	3x1½	3x2	4	4x1½	4x2	4x2½
EACH	.90	1.15	1.15	1.35	1.35	1.90	1.90	1.90	2.25	2.25	2.25	3.50	3.50	3.50	3.50
SIZE . INCHES	4x3	3x4	5	5x1½	5x2	5x3	5x4	6	6x2	6x3	6x4	6x5	7	8	10
EACH	3.50	3.50	5.50	5.50	5.50	5.50	5.50	7.00	7.00	7.00	7.00	7.00	11.50	14.50	20.00

Sizes differing from above can be furnished, but will be charged extra.
Galvanized Drainage Fittings double above list.

CAST-IRON DRAINAGE FITTINGS.



B-592. CLOSET TEE.



B-594. PLAIN TEE.



B-596. CLOSET TEE.

CLOSET TEES.—B-592.

SIZE . . . . . INCHES	3	4	5 x 4	6 x 4
WITH 2-INCH RIGHT-HAND INLET ON SIDE AND 2-INCH TOP INLET, EACH	----	5.50	7.00	9.00
WITH 2-INCH LEFT-HAND INLET ON SIDE AND 2-INCH TOP INLET . EACH	----	5.50	7.00	9.00
WITH 2-INCH INLETS ON BOTH SIDES AND 2-INCH TOP INLET . . EACH	----	6.00	7.50	10.00
WITH 2-INCH RIGHT-HAND INLET ON SIDE . . . . . EACH	3.00	3.50	6.50	8.00
WITH 2-INCH LEFT-HAND INLET ON SIDE . . . . . EACH	3.00	3.50	6.50	8.00

PLAIN TEES.—B-594.

SIZE . . . . . INCHES	1½	2	2 x 1½	3	3 x 2	4	4 x 2	4 x 3	5	5 x 2	5 x 3	6	6 x 4	7	8	10
EACH	.75	.90	.90	1.40	1.40	2.30	2.30	2.30	4.00	4.00	4.00	6.00	6.00	9.00	12.00	18.00

CLOSET TEES.—B-596.

SIZE . . . . . INCHES	3	4	5 x 4	6 x 4
WITH 2-INCH INLETS ON BOTH SIDES . . . . . EACH	3.50	4.00	7.00	10.00



B-598. CLOSET ELBOW, WITH FLANGE.



B-600. CLOSET ELBOW.



B-602. CLOSET FLANGE, IRON.



B-604. CLOSET FLANGE, BRASS.

CLOSET ELBOWS AND FLANGES.

SIZE . . . . . INCHES	4	4 x 5	5
B-598. WITH FLANGE 10 INCHES IN DIAMETER . . . . . EACH	2.50	----	----
B-600. . . . . EACH	----	3.70	----
B-602. IRON FLANGE, 10 INCHES IN DIAMETER . . . . . EACH	----	----	1.30
B-604. BRASS FLANGE 7½ INCHES IN DIAMETER . . . . . EACH	----	----	3.20

Sizes differing from above can be furnished, but will be charged extra. Galvanized Drainage Fittings double above list.

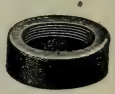
CAST-IRON DRAINAGE FITTINGS.



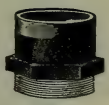
B-606.
INCREASER.



B-608.
AIR INLET CAP.



B-610.
ROOF CONNECTION.



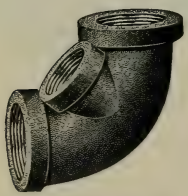
B-612.
BRASS NIPPLE.

INCREASERS.—B-606.

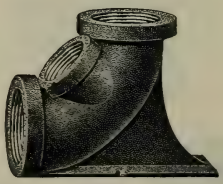
SIZE . . . . . INCHES	3 x 2	4 x 2	4 x 3	5 x 2	5 x 3	5 x 4	6 x 4	6 x 5	8 x 6
EACH	1.00	1.50	1.50	2.00	2.00	2.00	3.00	3.00	5.00

B-608, B-610 and B-612.

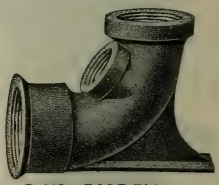
SIZE . . . . . INCHES	1	1¼	1½	2	3	4	5	6
B-608. FOR CAPPING AIR INLET PIPES . EACH	----	----	----	----	1.30	1.50	2.00	----
B-610. ROOF CONNECTIONS . . . . . EACH	----	----	----	.50	.80	1.00	1.20	2.00
B-612. BRASS SOLDERING NIPPLES . . EACH	.40	.63	.84	1.17	2.34	4.00	....	----



B-615.
ELBOW WITH CLEANOUT.



B-617.
BASE ELBOW WITH CLEANOUT.



B-619. BASE ELL
WITH CLEANOUT TO CONNECT
C. I. PIPE TO WROUGHT PIPE.

ELBOWS WITH CLEANOUTS.—B-615 and B-617.

SIZE . . . . . INCHES	2	3	4	5	6
B-615 . . . . . EACH	1.50	2.50	3.50	5.50	7.50
B-617 . . . . . EACH	2.00	3.00	4.00	6.75	9.00

BASE ELL WITH CLEANOUT TO CONNECT C. I. PIPE TO WROUGHT PIPE.—B-619.

SIZE . . . . . INCHES	3	4x3	4	5x4	5	6x4	6x5	6	8x6	8
B-619 . . . . . EACH	3.50	4.50	4.50	7.75	7.75	10.00	10.00	10.00	15.00	15.00

CAST IRON DRAINAGE FITTINGS.



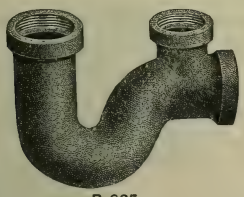
B-621.
ELBOW WITH SHOE.



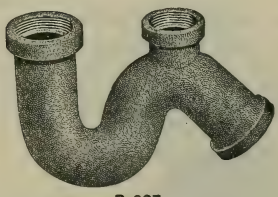
B-623.
BASIN TEE.

B-621 and B-623.

SIZE . . . . . INCHES	1½	2	2x1½	3	4	5	6
B-621 . . . . . EACH	-----	.90	-----	1.50	2 20	3.25	4.25
B-623 . . . . . EACH	1.25	1.35	1.35	-----	-----	-----	-----



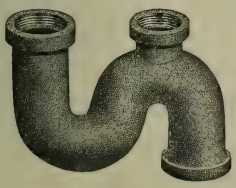
B-625.
HALF S TRAP.



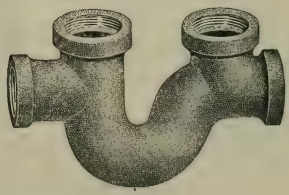
B-627.
THREE-QUARTER S TRAP.

TRAPS.—B-625 and B-627.

SIZE . . . . . INCHES	2	3	4	5	6	8
B-625 . . . . . EACH	2.25	3.00	4.50	7.50	14.00	22.00
B-627 . . . . . EACH	3.50	4.00	6.50	10.00	20.00	-----



B-629.
S TRAP.

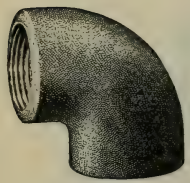


B-631.
RUNNING TRAP.

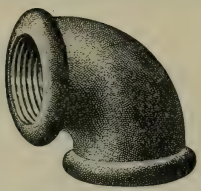
TRAPS.—B-629 and B-631.

SIZE . . . . . INCHES	2	3	4	5	6	8
B-629 . . . . . EACH	3.50	4.00	6.50	10.00	20 00	-----
B-631 . . . . . EACH	2.40	3.50	5.00	8.00	15.00	25.00

MALLEABLE IRON FITTINGS.



B-640. GAS ELBOW.



B-641. BEADED ELBOW.



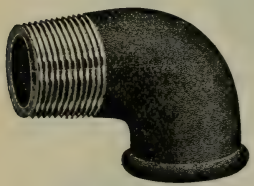
B-642. 45° ELBOW.

ELBOWS.—B-640 and B-641.

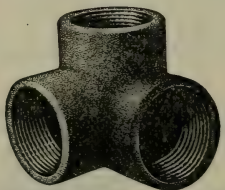
SIZE . . . . . INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6
PLAIN . . . . . EACH	.04	.04	.06	.10	.15	.22	.25	.35	.50	.80	1.50	2.25	3.00	4.00	5.00
GALVANIZED . . EACH	---	.05	.08	.14	.20	.32	.40	.60	.90	1.35	2.60	3.75	5.00	7.00	10.00

ELBOWS, 45°.—B-642.

SIZE . . . . . INCHES	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
PLAIN . . . . . EACH	.10	.12	.18	.26	.36	.54	.82	1.25	2.50	4.50
GALVANIZED . . EACH	.15	.20	.25	.40	.50	.85	1.35	2.00	3.75	8.00



B-644. STREET ELBOW.



B-645. SIDE OUTLET ELBOW.



B-646. FEMALE DROP ELBOW.

STREET ELBOWS.—B-644.

SIZE . . . . . INCHES	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
PLAIN . . . . . EACH	.10	.12	.20	.25	.40	.55	.90	1.50
GALVANIZED . . . . . EACH	.12	.15	.28	.35	.55	.80	1.30	2.40

SIDE OUTLET ELBOWS.—B-645.

SIZE . . . . . INCHES	3/8	1/2	3/4	1	1 1/4	1 1/2	2
EACH	.08	.10	.18	.30	.45	.60	1.00

FEMALE DROP ELBOWS.—B-646.

SIZE . . . . . INCHES	1/4	3/8 x 1/4	3/8	1/2 x 3/8	1/2	3/4 x 1/2	3/4	1
PLAIN . . . . . EACH	.06	.08	.08	.12	.12	.20	.20	.25
GALVANIZED . . . . . EACH	-----	.12	.12	.20	.20	.35	.35	.40

For Sizes, Weights and Classifications of Malleable Fittings, see pages 96 and 97.

MALLEABLE IRON FITTINGS.



B-650. MALE AND FEMALE DROP ELL.



B-651. DROP ELL FLANGE RIGHT.



B-652. DROP ELL FLANGE LEFT.



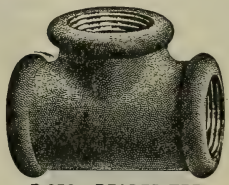
B-653. LONG DROP ELL.

DROP ELBOWS.—B-650, B-651, B-652 and B-653.

SIZE . . . . . INCHES	$\frac{1}{4}$x$\frac{3}{8}$	$\frac{3}{8}$x$\frac{3}{8}$	$\frac{1}{2}$x$\frac{3}{8}$
B-650. MALE AND FEMALE . . . . . EACH	.08	.12	.15
B-651 AND B-652. RIGHT OR LEFT DROP ELBOWS . . . . . EACH	.08	.08	--------
B-653. LONG DROP ELBOWS . . . . . EACH	.10	.10	--------
B-653. LONG DROP ELBOWS, GALVANIZED . . . . . EACH	.18	.18	--------



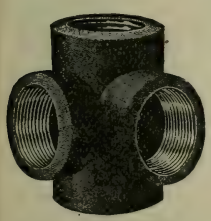
B-655. GAS TEE.



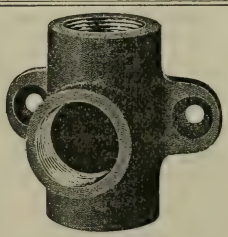
B-656. BEADED TEE.

TEES.—B-655 and B-656.

SIZE . . . . . INCHES	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
PLAIN . . . . . EACH	.07	.07	.08	.11	.15	.25	.30	.45	.60	1.05	1.70	2.50	3.40
GALVANIZED . . . . . EACH	---	.09	.10	.16	.20	.38	.50	.70	1.00	1.90	3.00	4.25	5.75



B-658. FOUR-WAY TEE.



B-659. DROP TEE.



B-660. DROP TEE, MALE AND FEMALE.

FOUR-WAY AND DROP TEES.—B-658, B-659 and B-660.

SIZE . . . . . INCHES	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
B-658. FOUR-WAY TEES, PLAIN . . . . . EACH	---	.12	.14	.20	.35	.50	.80
B-659 AND B-660. DROP TEES, PLAIN . . . . . EACH	.08	.10	.14	.22	.30	---	---
B-659 AND B-660. DROP TEES, GALVANIZED . . . . . EACH	---	.15	.25	.40	.55	---	---
LONG DROP TEES (NOT ILLUSTRATED) . . . . . EACH	---	.12	---	---	---	---	---

For sizes, weights and classification see pages 96 and 97.

MALLEABLE IRON FITTINGS.



B-665. GAS CROSS.



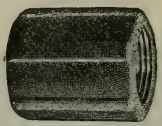
B-666. BEADED CROSS.

CROSSES.—B-665 and B-666.

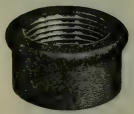
SIZE ..... INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
PLAIN ..... EACH	.08	.10	.12	.20	.30	.40	.60	1.00	1.75	3.00	3.25	5.25
GALVANIZED ..... EACH	----	.15	.17	.25	.45	.60	.90	1.50	2.75	4.25	5.00	8.00



B-668. REDUCER.



B-669. RIGHT AND LEFT COUPLING.



B-670. CAP.

REDUCERS.—B-668.

SIZE ..... INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
PLAIN ..... EACH	.03	.03	.05	.10	.16	.20	.28	.45	.70	1.00	1.50	1.85
GALVANIZED ..... EACH	----	.05	.08	.15	.25	.35	.45	.75	1.05	1.65	2.40	3.05

RIGHT AND LEFT COUPLINGS.—B-669.

SIZE ..... INCHES	¼	⅜	½	¾	1	1¼	1½	2
PLAIN ..... EACH	.04	.05	.08	.12	.16	.25	.36	.52
GALVANIZED ..... EACH	.06	.08	.10	.17	.25	.35	.55	.75

CAPS.—B-670.

SIZE ..... INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
PLAIN ..... EACH	.03	.04	.05	.08	.12	.16	.24	.32	.45	.85	1.00	1.20
GALVANIZED ..... EACH	.04	.05	.08	.12	.17	.24	.38	.52	.76	1.30	2.25	3.00

For Sizes, Weights and Classification of Malleable Fittings, see pages 96 and 97.

STREET TEES.—B-675.



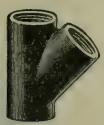
B-675.
STREET TEE.

SIZE . . . . . INCHES	⅜	½	1	1¼	1½	2	2½	3
PLAIN . . . . . EACH	.08	.15	.25	.30	.45	.60	1.05	1.70
GALVANIZED . . . . . EACH	10	.20	.38	.50	.70	1.00	1.90	3.00

REDUCING SIZES.

1 x ¾ x 1	1¼ x ¾ x 1¼	2 x 1 x 2	2½ x 2 x 2½
1 x 1 x ¾	1¼ x 1 x 1¼	2 x 1¼ x 2	3 x 2½ x 3
1 x 1 x 1¼	1½ x 1¼ x 1½	2 x 1½ x 2	----------

Reducing sizes list same as straight sizes. Largest opening designates size.



B-677.
Y BRANCH.



B-678.
DOUBLE Y BRANCH.



B-679. Y BRANCH.
REDUCING 1 SIZE.



B-680. Y BRANCH.
REDUCING 2 SIZES.

GALVANIZED Y BRANCHES.—B-677 and B-678.
FOR PLUMBING VENTILATION.

SIZE . . . . . INCHES	1	1¼	1½	2
B-677 . . . . . EACH	.40	.65	.90	1.40
B-678 . . . . . EACH	------	.85	1.20	1.85

GALVANIZED REDUCING Y BRANCHES—B-679 and B-680.

SIZE . . . . . INCHES	1½x1½x1	1½x1½x1¼	2x2x1¼	2x2x1½	1½x1¼x1¼	2x1½x1¼	2x1¼x1½
B-679 . . . . . EACH	.85	.85	1.30	1.30	--------	--------	--------
B-680 . . . . . EACH	--------	--------	--------	--------	.85	1.30	1.30

Y BRANCHES.—B-682.



B-682. Y BRANCH.

SIZE . . INCHES	½	¾	1	1¼	1½	2	2½
PLAIN . . EACH	.25	.40	.60	.80	1.00	1.70	2.00

Y BRANCHES, REDUCING SIZES.

SIZE . . . . . INCHES	1½x1¼	2x1½x1½	2x1¼	2x1½
PLAIN . . . . . EACH	1.00	1.70	1.70	1.70

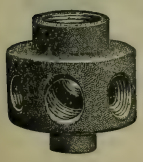
DOUBLE Y BRANCHES.—B-683.

SIZE . . . . . INCHES	1½	2
PLAIN . . . . . EACH	1.50	2.00

Galvanized Y Branches—double above lists.



B-683. DOUBLE Y BRANCH.



B-685.
CHANDELIER BODY.

CHANDELIER BODIES.—B-685.

SIZE . . . . . INCHES	¼x⅛	¼x¼	⅜x⅛	⅜x¼
TWO LIGHTS . . . . . EACH	.15	.21	--------	--------
THREE LIGHTS . . . . . EACH	.24	.30	.30	36
FOUR LIGHTS . . . . . EACH	.30	.36	.36	.42

MALLEABLE IRON FITTINGS.



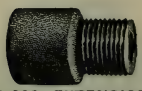
B-690. BUSHING.



B-691. FACED BUSHING.

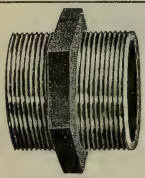


B-692. LOCKNUT.



B-693. EXTENSION.

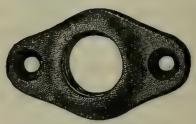
SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
BUSHINGS, PLAIN . . . . . EACH	---	.04	.04	.05	.06	.07	.09	.14	.21	---
BUSHINGS, GALVANIZED . . . . . EACH	---	.08	.08	.10	.12	.14	.18	.28	.42	---
FACED BUSHINGS, PLAIN . . . . . EACH	---	---	---	.11	.13	.17	.22	.32	.48	---
LOCKNUTS, PLAIN . . . . . EACH	.02	.03	.04	.05	.07	.09	.11	.18	.40	.50
LOCKNUTS, GALVANIZED . . . . . EACH	.03	.04	.05	.07	.10	.14	.20	.30	.55	.70
EXTENSION PIECES . . . . . EACH	---	.06	.09	.12	---	---	---	---	---	---



B-695. HEXAGON NIPPLE.



B-696. OFFSET COUPLING.



B-697. WASTE NUT.



B-698. WALL PLATE.

HEXAGON NIPPLES.—B-695.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
EACH	.25	.30	.40	.50	.70

OFFSET REDUCING COUPLINGS.—B-696.

SIZE . . . . . INCHES	1 x ¾	1¼ x 1	1½ x 1¼	2 x 1½	2½ x 2	3 x 2½	3½ x 3	4 x 3	5 x 4
EACH	.60	.70	.90	1.10	1.80	2.50	3.00	4.00	6.00

WASTE NUTS.—B-697.

SIZE . . . . . INCHES	¼	⅜	½	¾	1
PLAIN . . . . . EACH	.04	.05	.06	.08	.10
GALVANIZED . . . EACH	.08	.10	.12	.16	.20

WALL PLATES.—B-698.

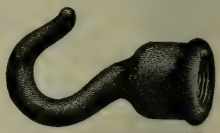
SIZE . . . . . INCHES	⅜
EACH	.12



B-700. LOOP.



B-701. HOOK, MALE.



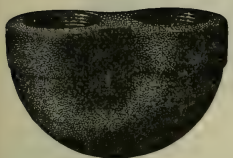
B-702. HOOK, FEMALE.

CHANDELIER LOOPS AND HOOKS.

SIZE . . . . . INCHES	⅜	½
B-700. CHANDELIER LOOPS . . . . . EACH	.10	.12
B-701 AND B-702. CHANDELIER HOOKS . . . . . EACH	.10	.12

For Sizes, Weights and Classification of Malleable Fittings, see pages 96 and 97.

MALLEABLE RETURN BENDS.



B-710. CLOSE PATTERN.



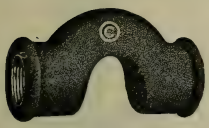
B-712. OPEN PATTERN.

RETURN BENDS, CLOSE PATTERN.—B-710.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
CENTER TO CENTER	1	1¼	1½	1¾	2 3/16	2⅝
RIGHT HAND, PLAIN . . . . . EACH	.13	.25	.35	.50	.75	1.00
RIGHT AND LEFT, PLAIN . . . . . EACH	.15	.30	.45	.60	.90	1.25
RIGHT HAND, GALVANIZED . . . . . EACH	.25	.35	.55	.75	1.15	1.65

RETURN BENDS, OPEN PATTERN.—B-712.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
CENTER TO CENTER	1½	2	2½	3	3½	4	4½	5
RIGHT HAND, PLAIN . . . . . EACH	.15	.30	.50	.65	.85	1.25	2.00	3.00
RIGHT AND LEFT, PLAIN . . . . . EACH	.20	.38	.60	.80	1.05	1.55	2.50	3.75
RIGHT HAND, GALVANIZED . . . . . EACH	.25	.45	.70	.90	1.25	2.00	3.50	5.00



B-715. CROSS-OVER.



B-716. CROSS-OVER, WITH BACK OUTLET SAME AS RUN.

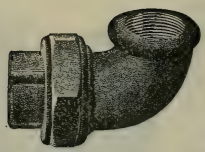


B-717. CROSS-OVER TEE.

CROSS-OVER FITTINGS, GALVANIZED.—B-715, B-716 and B-717.

FIGURE	B-715			B-716			B-717		
SIZE . . . . . INCHES	½	¾	1	½	¾	1	½	¾	1
TO CROSS OVER ¾-INCH PIPE . . . . . EACH	.22	----	----	.26	----	----	38	----	----
TO CROSS OVER ¾-INCH PIPE . . . . . EACH	.35	.32	----	----	.39	----	----	.56	----
TO CROSS OVER 1-INCH PIPE . . . . . EACH	.45	.50	.49	----	----	.60	----	----	.86
TO CROSS OVER 1¼-INCH PIPE . . . . . EACH	.60	.62	.68	----	----	----	----	----	----

For Sizes, Weights and Classification of Malleable Fittings, see pages 96 and 97.



B-720. FEMALE UNION ELBOW.

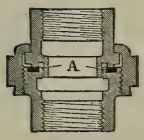


B-721. MALE UNION ELBOW.

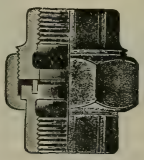
UNION ELBOWS.—B-720 and B-721.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
FEMALE, PLAIN . . . . . EACH	.42	.54	.63	.90	1.05	1.55	2.85
MALE, PLAIN . . . . . EACH	.48	.62	.72	1.05	1.20	1.80	3.30

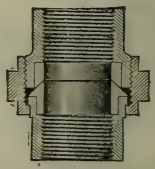
Galvanized Union Elbows, 50 per cent. added to plain list.



B-725. AMERICAN UNION.



B-726. ERIE UNION.



B-727. DART UNION.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
B-725, B-726. PLAIN . . . . . EACH	.20	.24	.28	.35	.40	.56	.80	.95	2.00	2.75
B-725, B-726. GALVANIZED . . . . . EACH	.24	.28	.35	.46	.55	78	1.12	1.35	2.90	3.75
B-727. PLAIN . . . . . EACH	.30	.40	.50	.60	.80	1.20	1.60	2.00	3.20	4.80
B-727. GALVANIZED . . . . . EACH	.45	.60	.75	.90	1.20	1.80	2.40	3.00	4.80	6.20

The Dart Union has interchangeable seats of bronze which can be replaced without removing from the pipes.



B-730. UNION

MALLEABLE UNIONS.—B-730.

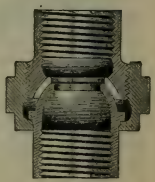
SIZE . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
PLAIN . . . . . EACH	.18	.20	.22	.27	.33	.46	.58	.75	1 55	2.10	3.65	4.35
GALVANIZED . . EACH	.27	.30	.33	.40	.50	.70	.90	1.15	2.35	3.15	5.50	6.50



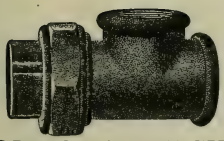
B-731.
KEYSTONE UNION.

KEYSTONE UNIONS.—B-731.

SIZE . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
PLAIN . . EACH	.20	.24	.28	.35	.40	.56	.80	.95	2.00	2.75
GALV. . . EACH	.24	.28	.35	.46	.55	.78	1.12	1.35	2.90	3.75



B-731.
SECTIONAL VIEW.



B-735. FEMALE UNION TEE.

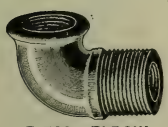


B-736. MALE UNION TEE.

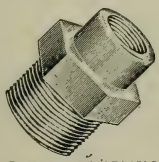
UNION TEES.—B-735 and B-736.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
FEMALE, PLAIN . . . . . EACH	.45	.57	.70	.95	1.15	1.70	3.20
MALE, PLAIN . . . . . EACH	.52	.65	.80	1.10	1.30	1.95	3.70

Galvanized Union Tees, 50 per cent. added to Plain list.



B-738. ELBOW.



B-739. COUPLING.



B-740. UNION ELBOW.



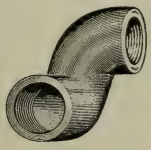
B-741. UNION COUPLING.

CIRCULATING BOILER FITTINGS, GALVANIZED.

SIZE . . . . . INCHES	Female, Male. ¾ x ¾ x 1	Female, Male. ¾ x ½ x 1	Female, Male. ½ x ½ x 1
B-738. ELBOW . . . . . EACH	.40	.40	.40
B-739. COUPLING . . . . . EACH	.40	.40	.40
B-740. ELBOW WITH UNION . . . . . EACH	.75	.75	.60
B-741. COUPLING WITH UNION . . . . . EACH	.75	.75	.60



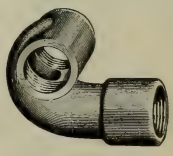
B-745.
RANGE BOILER UNION TEE.



B-746.
LEFT HAND ELBOW.



B-747.
RIGHT HAND ELBOW.



B-748.
WASH TRAY TEE.



TEES AND ELBOWS AS APPLIED.

MAL. IRON, GALV. EACH	.60

Made to fit any style of iron range boiler.

WASH TRAY FITTINGS.—B-746, B-747 and B-748.

SIZE . . . . . INCHES	½	¾
B-746 OR B-747. MALLEABLE IRON, GALVANIZED . . . . . EACH	.20	.30
B-746 OR B-747. BRASS . . . . . EACH	.40	.60
B-748. MALLEABLE IRON, GALVANIZED . . . . . EACH	.20	.30
B-748. BRASS . . . . . EACH	.40	.60

These Boiler and Wash Tray Fittings require fewer fittings, less pipe, less labor and less space than the old style and are a decided improvement over previous methods. Send for special circulars.

STANDARD SIZES OF MALLEABLE FITTINGS.

ELBOWS.

⅛	P
¼x⅜	P
*¼	P & B
⅜x½	P
*½	P & B
¾	B
*¾x½	P & B
*¾	B
¼x1	B
*1x½	P & B
*1x¾	P & B
*1¼	P & B
*1¼x1	P & B
*1½	P & B
1½x1	P & B
*1½x1¼	P & B
*1½	P & B
2x¾	P
2x1	P & B
2x1¼	P & B
*2x1½	P & B
*2	P & B
2½x2	B
2½	B
3	B
3x2½	B
*3	P & B
3½x3	B
3½	B
4x3	B
4x3½	B
*4	B
4½	B
5	B
6	B

STREET ELLS.

⅛	B
*⅛	B
¼	B
*¼x⅜	P & B
*¼	P & B
*⅜x½	P & B
⅜x¼	P & B
*⅜	P & B
½x⅜	P & B
*½	P & B
½x¾	P & B
*½x¾	P & B
*¾	P & B
¾x½	P & B
*¾	P & B
1x⅜	P & B
*1x½	P & B
*1x¾	P & B
*1	P & B
1¼x¾	P & B
*1¼x1	P & B
*1¼	P & B
1¼x¾	P & B
1¼x1	P & B
*1¼x1¼	P & B
1½x1	P & B
1½x1¼	P & B
*1½	P & B

STREET ELLS.

1⅛x1	B
1⅛x1¼	B
*1½	B
2x1	B
2x1¼	B
2x1½	B
2½	B
2½x2	B
2½x1½	B
3	B

SIDE OUTLET ELBOWS.

*⅜x⅜x⅜	P
½x½x½	P
*½x½x½	P
¾x¾x¾	P
*¾x¾x¾	P
1x1x1	P
1x1x1¼	P
*1x1¼x1¼	P
1x1¼x1	P
1¼x1¼x1	P
*1¼x1¼x1¼	P
2x2x2	P

DROP ELLS.

FEMALE.

¼x½	P
⅜x½	P
⅜x¾	P
½x¾	P
*½x⅝	P
½x1	P
*½x¾	P
*½x⅝	P
*½x1	P

TEES.

¼x¼x¼	P
¼x¼x½	P
¼x½x½	P
¼x½x¾	P
⅜x⅜x⅜	P
⅜x⅜x½	P
⅜x½x⅜	P
⅜x½x½	P
⅜x½x¾	P
⅜x¾x½	P
⅜x¾x¾	P
½x⅜x½	P
½x½x⅜	P
½x½x½	P
½x½x¾	P
½x¾x½	P
½x¾x¾	P
½x¾x1	P
½x1x½	P
½x1x¾	P
½x1x1	P
¾x¾x¾	P
¾x¾x1	P
¾x1x¾	P
¾x1x1	P
1x1x1	P
1x1x1¼	P
1x1¼x1¼	P
1¼x1¼x1¼	P
1½x1½x1½	P
2x2x2	P

TEES.

⅛x⅛x⅛	P
*⅛x⅜x⅜	P & B
¼x¼x¼	P & B
¼x¼x⅜	P & B
¼x¼x½	P & B
¼x⅜x⅜	P & B
¼x⅜x½	P & B
¼x½x½	P & B
⅜x⅜x⅜	P & B
⅜x⅜x½	P & B
⅜x⅜x¾	P & B
⅜x½x⅜	P & B
⅜x½x½	P & B
⅜x½x¾	P & B
⅜x¾x½	P & B
⅜x¾x¾	P & B
½x⅜x½	P & B
½x½x⅜	P & B
½x½x½	P & B
½x½x¾	P & B
½x¾x½	P & B
½x¾x¾	P & B
½x¾x1	P & B
½x1x¾	P & B
½x1x1	P & B
¾x¾x¾	P & B
¾x¾x1	P & B
¾x1x¾	P & B
¾x1x1	P & B
1x1x1	P & B
1x1x1¼	P & B
1x1¼x1¼	P & B
1¼x1¼x1¼	P & B
1½x1½x1½	P & B
2x2x2	P & B

TEES.

*1⅛x1⅛x1	P & B
*1¼x1¼x1¼	P & B
*1¼x1¼x1½	P & B
1¼x1¼x2	P & B
1¼x1¼x3	P & B
1¼x1¼x4	P & B
1½x1½x1	P & B
1½x1½x1½	P & B
1½x1½x2	P & B
1½x1½x3	P & B
1½x1½x4	P & B
2x2x2	P & B
2x2x2½	P & B
2x2x3	P & B
2x2x4	P & B
2½x2½x1	P & B
2½x2½x1½	P & B
2½x2½x1¼	P & B
2½x2½x2	P & B
2½x2½x2½	P & B
3x3x1	P & B
3x3x1½	P & B
3x3x1¼	P & B
*3x3x2	P & B
*3x3x2½	P & B
*3x3x3	P & B
3½x3½x2	B
3½x3½x2½	B
3½x3½x3	B

TEES.

3½x3½x3½	B
4x4x2	B
4x4x2½	B
4x4x3	B
4x4x3½	B
*4x4x4	B
4½x4½x4½	B
5x5x5	B
6x6x6	B

TEES.

LONG DROP.

⅜x⅜x⅜	P

TEES.

DROP FEMALE.

¼x¼x½	P
⅜x⅜x½	P
*⅜x⅜x¾	P
½x¼x½	P
½x¼x¾	P
½x⅜x½	P
½x⅜x¾	P
½x½x½	P
½x½x¾	P
½x¾x½	P
½x¾x¾	P
¾x½x¾	P
¾x¾x½	P
¾x¾x¾	P
¾x¾x1	P
¾x1x¾	P
¾x1x1	P
1x1x1	P

TEES.

DROP—M. & F.

¼x¼x⅜	P
⅜x⅜x⅜	P
*⅜x⅜x½	P
½x⅜x⅜	P
½x⅜x½	P
½x½x⅜	P
*½x½x½	P
¾x½x⅜	P
¾x½x½	P
¾x¾x½	P
¾x¾x¾	P
1x½x¾	P
1x1x¾	P
1x1x1	P

TEES.

CROSSES.

¼x¼x½	P
⅜x⅜x⅜	P

CROSSES.

⅜x⅜x¼	P
⅜x⅜x½	P & B
½x½x½	P
½x½x¾	P & B
¾x¾x¾	P
1x1x1	P & B
1x1x1¼	P & B
1x1x1½	P & B
1x1x2	P & B
1x1¼x1¼	P & B
1x1¼x1½	P & B
1x1¼x2	P & B
1x1½x1½	P & B
1x1½x2	P & B
1¼x1¼x1¼	P & B
1¼x1¼x1½	P & B
1¼x1¼x2	P & B
1½x1½x1½	P & B
1½x1½x2	P & B
2x2x2	P & B

REDUCERS.

⅜x⅛	P
½x⅛	P
½x¼	P & B
¾x⅛	P & B
¾x¼	P & B
¾x½	P & B
1x⅜	P & B
1x½	P & B
1x¾	P & B
1¼x½	P & B
1¼x¾	P & B
1¼x1	P & B
1½x¾	P & B
1½x1	P & B
1½x1¼	P & B
2x1	P & B
2x1¼	P & B
2x1½	P & B
2½x1½	P & B
2½x2	P & B
3x2	P & B
3½x2½	P & B
4x3	P & B
4x3½	P & B

EXTENSION PIECES.

⅜x⅜	P
½x½	P
¾x¾	P

Y BRANCHES.

¼	B
⅜	B
1	B
1¼	P & B
1½	P & B
2	P & B
2x1¼x1¼	P & B
2x1½	P & B
2x1½	P & B

REDUCERS.

¼x⅛	P
⅜x⅛	P
⅜x¼	P & B
½x¼	P
*½x⅜	P & B
¾x½	P

REDUCERS.

⅛x⅛	P
¼x⅛	P
¼x⅜	P & B
⅜x⅛	P
⅜x¼	P & B
⅜x⅜	P
*½x⅛	P & B
½x¼	P & B
½x⅜	P & B
½x½	P
¾x⅜	P & B
¾x½	P & B
¾x¾	P
1x½	P & B
1x¾	P & B
1x1	P & B
1¼x½	P & B
1¼x¾	P & B
1¼x1	P & B
1½x¾	P & B
1½x1	P & B
1½x1¼	P & B
2x1	P & B
2x1¼	P & B
2x1½	P & B
2½x1½	P & B
2½x2	P & B
3x2	P & B
3½x2½	P & B
4x3	P & B
4x3½	P & B

NOTE.—The letter "P" following sizes, indicates that Fittings are made in Plain pattern only; "B" indicates Beaded pattern; "P & B" indicates that they are made both Plain and Beaded.

In ordering, be particular to state which pattern is wanted.

*Carried in stock, Galvanized.

REVISED CLASSIFICATION AND PRICE LIST MALLEABLE FITTINGS.

(SUPERSEDING ALL PREVIOUS CLASSIFICATIONS.)

ADOPTED BY MANUFACTURERS NOV. 4TH, 1901.

CLASS A.

ELBOWS ..... $\frac{1}{4}$, $\frac{1}{4}$ x $\frac{1}{8}$, $\frac{3}{8}$ x $\frac{1}{4}$.
TEES ..... $\frac{1}{8}$, $\frac{1}{8}$ x $\frac{1}{4}$, $\frac{1}{4}$ x $\frac{1}{8}$, $\frac{3}{8}$ x $\frac{1}{8}$.
R. & L. COUPLINGS ..... $\frac{1}{8}$ in.
REDUCERS ..... $\frac{1}{4}$ x $\frac{1}{8}$, $\frac{3}{8}$ x $\frac{1}{8}$.
R. H. COUPLINGS ..... $\frac{1}{8}$ in.
ELLS, R. & L. ..... $\frac{1}{4}$, $\frac{3}{8}$.
R. & L. RETURN BENDS ..... $\frac{3}{8}$, $\frac{1}{2}$.
ROD COUPLINGS .....

CLASS B

ELBOWS ..... $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{8}$ x $\frac{1}{4}$, $\frac{1}{2}$ x $\frac{1}{4}$.
TEES ..... $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{4}$ x $\frac{3}{8}$, $\frac{3}{8}$ x $\frac{1}{4}$ x $\frac{1}{4}$, $\frac{3}{8}$ x $\frac{1}{2}$, $\frac{3}{8}$ x $\frac{1}{4}$ x $\frac{3}{8}$.
ELBOWS, SIDE OUTLETS ..... $\frac{1}{2}$ in. and smaller.
TEES, SIDE OUTLETS ..... $\frac{1}{2}$ in. and smaller.
STREET ELLS ..... $\frac{1}{4}$, $\frac{3}{8}$.
CROSSES ..... $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$.
REDUCING CROSSES ..... 1 in. and smaller.
DROP ELLS AND TEES ..... $\frac{1}{2}$ in. and smaller.
CAPS ..... $\frac{1}{4}$, $\frac{3}{8}$.
LOCK NUTS ..... $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$.
REDUCERS ..... $\frac{3}{8}$ x $\frac{1}{4}$, to $\frac{3}{4}$ x $\frac{3}{8}$ in., inclusive.
EXTENSION PIECES ..... $\frac{3}{8}$ and $\frac{1}{2}$ in.
R. & L. COUPLINGS ..... $\frac{1}{4}$, $\frac{3}{8}$.
R. H. COUPLINGS ..... $\frac{1}{4}$, $\frac{3}{8}$.
R. & L. ELBOWS ..... $\frac{1}{2}$ in.
WASTE NUTS ..... $\frac{3}{4}$ in. and smaller.
CHANDELIER HOOKS ..... all sizes.
RETURN BENDS ..... $\frac{3}{8}$ and $\frac{1}{2}$ in.
RETURN BENDS, R. & L. ..... $\frac{3}{4}$, 1.
WALL PLATES ..... all sizes.
45° ELLS ..... $\frac{1}{2}$ in. and smaller.
Y's ..... $\frac{1}{2}$, $\frac{3}{4}$.

CLASS C.

ELBOWS ..... $\frac{1}{2}$ and $\frac{1}{2}$ x $\frac{3}{8}$ in.
ELBOWS, R. & L. ..... $\frac{3}{4}$, 1.
TEES ..... $\frac{1}{2}$ and $\frac{1}{2}$ reducing.
ELBOWS, SIDE OUTLETS ..... $\frac{3}{4}$ in. and larger.
TEES, SIDE OUTLETS ..... $\frac{3}{4}$ in. and larger.
STREET ELLS ..... $\frac{1}{2}$, $\frac{3}{4}$, $\frac{3}{4}$ x $\frac{1}{2}$, 1 x $\frac{3}{4}$.
CROSSES ..... 1 and $\frac{3}{4}$ in., straight.
DROP ELLS ..... $\frac{3}{4}$ in. and larger.
DROP TEES ..... $\frac{3}{4}$ in. and larger.
CAPS ..... $\frac{1}{2}$, $\frac{3}{4}$ and 1 in.
LOCK NUTS ..... $\frac{3}{4}$, 1, $1\frac{1}{4}$.
REDUCERS ..... $\frac{3}{4}$ x $\frac{1}{2}$ to 1 in., inclusive.
R. & L. COUPLINGS ..... $\frac{1}{2}$, $\frac{3}{4}$.
R. H. COUPLINGS ..... $\frac{1}{2}$, $\frac{3}{4}$.
EXTENSION PIECES ..... $\frac{3}{4}$ in. and larger.
WASTE NUTS ..... 1 in. and larger.
RETURN BENDS ..... $\frac{3}{4}$, 1.
45° ELLS ..... $\frac{3}{4}$ to 2 in., inclusive.
Y's ..... 1 in. and larger.
RETURN BENDS, R. & L. ..... $1\frac{1}{4}$ in. and larger.

CLASS D.

ELBOWS & TEES ..... $\frac{3}{4}$ and 1 in.
CROSSES ..... $1\frac{1}{4}$ in. and larger.
STREET ELLS ..... 1 in. and larger.
CAPS ..... $1\frac{1}{4}$ in. and larger.
LOCK NUTS ..... $1\frac{1}{4}$ in. and larger.
REDUCERS ..... $1\frac{1}{4}$ in. and larger.
R. H. COUPLINGS ..... 1 and $1\frac{1}{4}$ in.
R. & L. COUPLINGS ..... 1 in. and larger.
R. & L. ELBOWS ..... $1\frac{1}{4}$ in. and larger.
45° ELBOWS ..... $2\frac{1}{4}$ in. and larger.
RETURN BENDS ..... $1\frac{1}{4}$ in. and larger.

Such Fittings as have smaller outlets than $\frac{3}{4}$ in. will be classed "C."

CLASS E.

ELBOWS & TEES ..... $1\frac{1}{4}$ in. and larger.
R. H. COUPLINGS ..... $1\frac{1}{4}$, 2.

Such Fittings in this class that have outlets smaller than 1 in. to be classed "D."

The run of Tees (Bullheads) gives the size for the purpose of classification, and the outlet being larger does not change it.

Return Bends, reduced; Return Bends, tapped on spread; Elbows, tapped on pitch ..... 15 per cent. added.
R. & L. Fittings, not classified above, in lots less than 100 pounds ..... 15 per cent. added.

PRICES.

CLASS		A	B	C	D	E
BLACK	PER POUND	.40	.20	.16	.13	.11
GALVANIZED	PER POUND	.50	.27	.23	.20	.18

L. of C.



B-770. ELBOW.



B-771. SIDE OUTLET ELBOW.



B-772. TEE.



B-773. SIDE OUTLET TEE.



B-775. CROSS.



B-776. SIDE OUTLET CROSS.



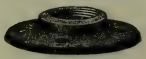
B-777. ORNAMENT.



B-778. BUSHING.



B-779. FLANGE.



B-780. CAST-IRON FLANGE.

MALLEABLE RAILING FITTINGS.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
B-770. ELBOW . . . . . EACH	.15	.18	.20	.35	.45	.72
B-771. SIDE OUTLET ELBOW . . . . . EACH	.20	.23	.25	.40	.50	.80
B-772. TEE . . . . . EACH	.20	.23	.25	.40	.50	.75
B-773. SIDE OUTLET TEE . . . . . EACH	.30	.33	.35	.45	.55	.90
B-775 CROSS . . . . . EACH	.30	.33	.35	.45	.58	1.00
B-776. SIDE OUTLET CROSS . . . . . EACH	.35	.38	.40	.50	.65	1.35
B-777. ACORN ORNAMENT . . . . . EACH	.16	.18	.20	.25	.35	.90
B-778. BUSHING . . . . . EACH	--	.06	.07	.10	.12	.18

Right and Left or Left Hand, also Reducing sizes, charged at 25 per cent. net additional.
Bushings reduce one or two sizes.

RAILING FLANGES.—B-779 and B-780.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2
B-779 . . . . . EACH	--	.14	.15	.15	.20	.28	.30
B-780 . . . . . EACH	.12	.14	.15	.15	.20	.28	.30

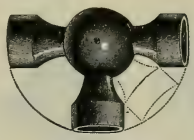
BRASS FINISHED RAILING FITTINGS.

SIZE	½	¾	1	1¼	1½	2
B-770. ELBOW . . . . . EACH	.60	.70	.80	1.20	1.60	2.50
B-771. ELBOW, SIDE OUTLET . . . . . EACH	.80	.90	1.10	1.70	2.00	3.00
B-772. TEE . . . . . EACH	.80	.90	1.10	1.70	2.00	3.00
B-773. TEE, SIDE OUTLET . . . . . EACH	1.20	1.30	1.50	2.00	2.40	3.50
B-775. CROSS . . . . . EACH	1.20	1.30	1.50	2.00	2.40	3.50
B-776. CROSS, SIDE OUTLET . . . . . EACH	1.40	1.50	1.70	2.25	3.00	4.00
B-777. ACORN ORNAMENT . . . . . EACH	1.00	1.50	2.00	2.50	3.25	4.50
B-778. FLOOR FLANGE . . . . . EACH	.30	.40	.55	.75	1.00	1.30

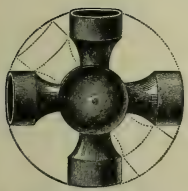
ADJUSTABLE RAILING FITTINGS.



B-785. ELBOW.



B-786. TEE.



B-787. CROSS.



B-788. STAIR TEE.



B-789. STAIR CROSS.

ADJUSTABLE RAILING FITTINGS, IRON.

SIZE ..... INCHES	1	1¼	1½	2
B-785 ..... EACH	1.10	1.25	1.70	2.25
B-786 ..... EACH	1.30	1.50	2.00	2.50
B-787 ..... EACH	1.50	1.75	2.35	2.75
B-788 ..... EACH	1.30	1.60	2.15	2.50
B-789 ..... EACH	1.50	1.85	2.50	2.75

By means of these Fittings, almost any angle may be obtained in Railings for stairs and other places requiring a deviation from horizontal or perpendicular lines, which would otherwise require special patterns to attain the same results.

ADJUSTABLE RAILING FITTINGS, POLISHED BRASS.

SIZE ..... INCHES	1	1¼	1½	2
B-785 ..... EACH	2.75	3.15	4.25	5.65
B-786 ..... EACH	3.25	3.75	5.00	6.25
B-787 ..... EACH	3.75	4.40	5.90	6.90
B-788 ..... EACH	3.25	4.00	5.40	6.25
B-789 ..... EACH	3.75	4.65	6.25	6.90



B-792. TEE.



B-793. CROSS.



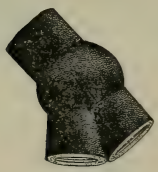
B-794. LOAFER RAIL.

ADJUSTABLE RAILING FITTINGS, IRON.—B-792, B-793 and B-794.

SIZE ..... INCHES	1	1¼	1½	2
B-792. STAIR LANDING TEE ..... EACH	.90	1.10	1.50	2 15
B-793. STAIR LANDING CROSS ..... EACH	1.00	1.20	1.60	2.40
B-794. PER LENGTH OF 18 INCHES ..... EACH	.30	.30	30	.30


B-800.


B-801.


B-802.


B-803.


B-804.

45° ANGLE MALLEABLE IRON RAILING FITTINGS.

SIZE — INCHES	1	1¼	1½	2	2½	3
B-800. ELBOW — EACH	.40	..70	.90	1.44	2.00	3.00
SIDE OUTLET, NOT ILLUSTRATED — EACH	.50	.80	1.00	1.60	2.30	3.40
B-801. ELBOW — EACH	.40	.70	.90	1.44	2.00	3.00
SIDE OUTLET, NOT ILLUSTRATED — EACH	.50	.80	1.00	1.60	2.30	3.40
B-802. TEE — EACH	.50	.80	1.00	1.60	2.40	3.80
SIDE OUTLET, NOT ILLUSTRATED — EACH	.70	.90	1.10	1.80	2 80	4.30
B-803. CROSS — EACH	.70	.90	1.16	2.00	3.00	4.50
SIDE OUTLET, NOT ILLUSTRATED — EACH	.80	1.00	1.30	2.70	3.50	5.20
B-804. FLOOR FLANGE — EACH	.30	.40	.56	.60	1.00	1.50

Always furnished tapped right hand unless otherwise ordered.
Right and left or left hand charged at 25 per cent. additional.
Angle Railing Fittings can be furnished in brass.

THE "GRIFFIN" FOOT RAIL FITTINGS.


B-808. CORNER FITTING.


B-809. BRACKET.


B-810. END FINISH.

SIZE — ONE INCH	Plain Iron.	Bronzed Iron.	Galvanized Iron.	Artistic Brass.
BRACKETS — EACH	.50	.85	.85	3.50
CORNER FITTINGS — EACH	.50	.75	.75	3.00
END FINISH FITTINGS — EACH	.15	.25	.25	1.40



B-813. COUNTER BRACKET.



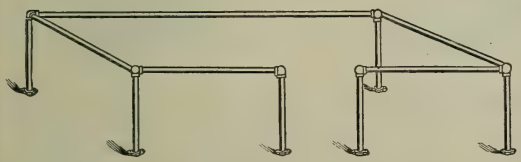
B-814. HINGE FOR PIPE GATES.



B-815. BRASS RAILING CAP.

RAILING TRIMMINGS.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
COUNTER BRACKETS, CAST IRON . . . . . EACH	.25	.30	.50	1.00	1.25
FINISHED BRASS CAPS . . . . . EACH	.60	.80	1.00	1.20	1.75
HINGE FOR PIPE GATES . . . . . EACH	.60	.70	.85	1.25	1.50

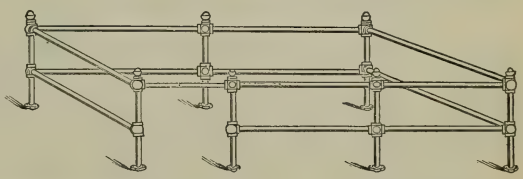


B-817.

PLEASE READ THIS NOTICE WITH CARE.

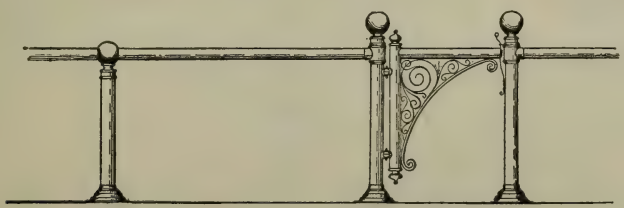
To construct a Railing *two* pipes high, the upper outlet of all fittings used in lower pipes should be tapped with *left-hand thread*, but when orders are sent us without specifying how outlets are to be tapped, *all fittings will invariably be furnished right-hand.*

As the fittings do not need to be steam or water-tight, a sufficiently clean thread to screw up well and make a good job can be made by running a *left-hand tap* into any outlet tapped *right-hand.*



B-818.

A neat and simple gate can be made by reducing with a bushing the outlets of the fittings on each side of the passage-way, and then using a smaller size pipe to slide back and forward inside of the top rail, with a pin to prevent its running back too far. (See dotted line in cut.)

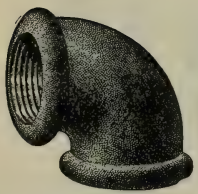


B-819. DESIGN FOR BRASS RAILING.

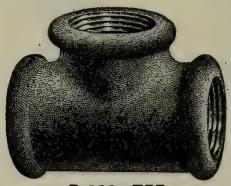
Prices on Brass Posts, Gates, and all trimmings furnished upon application.

BRASS STEAM AND WATER FITTINGS.

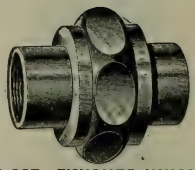
ROUGH AND FINISHED. - IRON PIPE THREADS.



B-825. ELBOW.



B-826. TEE.



B-827. FINISHED UNION.

ELBOWS.

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
ROUGH . . . . . EACH	.12	.17	.21	.28	.35	.50	.85	1.10	1.50	3.50	4.50	7.00	10.00
REDUCING, ROUGH . . EACH	---	.22	.26	.35	.45	.62	1.10	1.40	1.90	4.40	5.65	8.75	12.50
45° ROUGH . . . . . EACH	---	.25	.30	.40	.50	.75	1.25	1.65	2.25	5.25	6.75	----	-----
STREET, ROUGH . . . EACH	---	---	---	.55	.75	1.00	1.80	2.50	3.25	----	----	----	-----

TEES.

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
ROUGH . . . . . EACH	.15	.20	.30	.40	.50	.75	1.00	1.30	1.75	4.00	5.50	9.00	13.00
REDUCING, ROUGH . . EACH	---	.25	.38	.50	.63	.95	1.25	1.65	2.20	5.00	6.90	11.25	16.25

CROSSES.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
ROUGH . . . . . EACH	.30	.40	.50	.60	.80	1.50	2.00	3.50	5.00	7.00	10.00	14.50
REDUCING, ROUGH . . EACH	.38	.50	.65	.75	1.00	1.90	2.50	4.40	6.25	8.75	12.50	18.00

REDUCERS.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3
ROUGH . . . . . EACH	.22	.32	.45	.65	.90	1.12	1.85	3.00	4.50

RETURN BENDS.

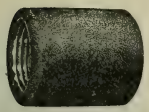
SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
CLOSE PATTERN, ROUGH . . . . . EACH	.40	.75	1.15	1.65	2.50	4.00
OPEN PATTERN, ROUGH . . . . . EACH	.50	1.00	1.35	2.00	3.00	4.50

UNIONS.

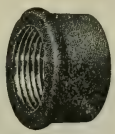
SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
FINISHED . . . . . EACH	.32	.36	.50	.70	.90	1.25	1.70	2.50	3.60	6.00	7.75

Finished Fittings, double above list.

BRASS STEAM AND WATER FITTINGS. IRON PIPE THREADS.



B-830. COUPLING.



B-832. CAP.



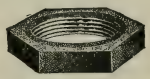
B-834. PLUG.

COUPLINGS, CAPS, AND PLUGS.

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
COUPLINGS, ROUGH . EACH	.10	.14	.16	.25	.37	.50	60	.90	1.35	2.40	3.50
COUPLINGS R. & L., RGH., EACH	---	.17	.20	.30	.45	.60	.75	1.12	1.75	----	----
CAPS, ROUGH . . . . EACH	.15	.15	.20	.25	.35	.45	.60	.80	1.10	2.00	3.00
PLUGS, ROUGH . . . EACH	.09	.10	.12	.15	20	.28	.40	.50	.90	1.25	2.00



B-836. NIPPLE.



B-838. LOCKNUT.



B-840. BUSHING.

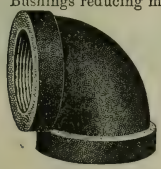
NIPPLES.—B-836.

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
CLOSE . . . . . EACH	.12	.15	.20	.25	.30	.40	.60	90	1.25	2.50	3.50
ROUGH, TO 4 IN. LONG, EACH	.15	.20	.30	.35	.45	.60	.90	1.25	1.60	3.00	4.50

LOCKNUTS AND BUSHINGS.—B-838 and B-840.

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
LOCKNUTS, ROUGH, EACH	.10	.10	.12	.15	.20	.30	.45	.70	.95	1.50	2.75
BUSHINGS . . . . . EACH	---	.10	12	.14	.21	.38	.50	.67	1.00	1.50	2.50

Bushings reducing more than two sizes, made to order at special price. Finished Fittings double above list.



B-845. ELBOW.

EXTRA HEAVY ROUGH BRASS STEAM FITTINGS.

MADE FROM
STANDARD CAST-IRON FITTING PATTERNS.

SUITABLE FOR WORKING STEAM PRESSURE OF 250 LBS.



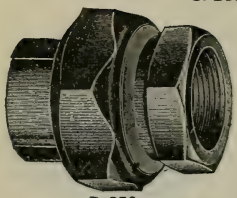
B-848. TEE.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3
ELBOWS . . . . . EACH	.28	.36	.70	1.00	1.50	2.00	3.00	5.50	8.50
ELBOWS, 45° . . . . . EACH	----	.43	.84	1.20	1.86	2.40	3.60	6.60	10.20
TEES . . . . . EACH	40	.65	1.00	1.35	2.00	3.00	4.50	7.50	11.00
CROSSES . . . . . EACH	----	.90	1.30	1.80	2.75	4.00	5.25	9.00	14.00
RETURN BENDS, CLOSE PATTERN . . . . . EACH	----	.70	.85	1.00	2.25	2.75	4.50	----	----
RETURN BENDS, OPEN PATTERN . . . . . EACH	----	.75	1.00	1.75	3.00	3.75	6.00	----	----

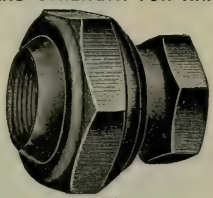
Other Fittings and Reducing sizes made to order at special prices.

HIGH PRESSURE BRASS UNIONS.

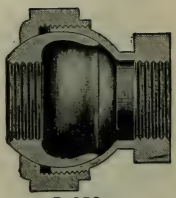
SPECIAL WEIGHT AND STRENGTH FOR HARD SERVICE.



B-850.
BRASS UNION, GROUND JOINT.



B-852.
BRASS UNION, BALL JOINT.



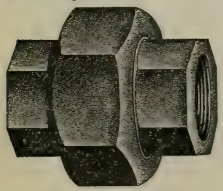
B-852.
SECTIONAL VIEW.

HIGH PRESSURE BRASS UNIONS.—B-850 and B-852.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
B-850 . . . . . EACH	.75	1.00	1.40	1.90	2.75	4.00	6.50	8.50
B-852 . . . . . EACH	1.80	2.00	2.50	3.00	4.50	7.50	13.00	----

These Unions are especially adapted to Blast Furnace and other high pressure work, being made to stand rough service. B-852 is an excellent Union for use where pipes are not in perfect line, and on Tuyere connections facilitates quick changing of the Tuyeres.

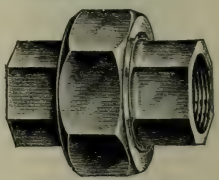
EXTRA HEAVY OCTAGON BRASS UNIONS.—B-855 and B-857.



B-855. ROUGH
OCTAGON BRASS UNION.

SIZE . . INCHES	¼	⅜	½	¾	1	1¼
ROUGH . . . EACH	.40	.55	.75	1.00	1.40	1.90
FINISHED . . EACH	.55	.75	1.00	1.50	2.00	2.50

SIZE . . INCHES	1½	2	2½	3	3½	4
ROUGH . . . EACH	2.75	4.00	6.50	8.50	13.50	18.50
FINISHED . . EACH	3.00	4.50	7.50	10.00	-----	-----



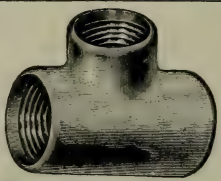
B-857. FINISHED
OCTAGON BRASS UNION.



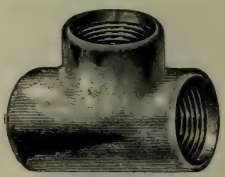
B-860. ELBOW.



B-862. REDUCING ELBOW.



B-864. TEE.



B-866. REDUCING TEE.

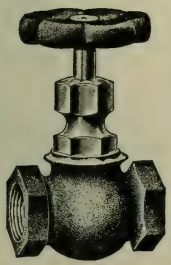
RECESSED BRASS FITTINGS.

FOR FINE PLUMBING WORK. THE RECESS COVERS THREADS, WHICH ARE ORDINARILY EXPOSED.

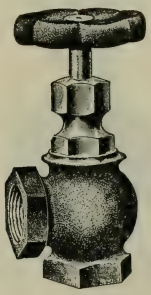
SIZE . . . . . INCHES	⅜	½	¾	1	*1¼	*1½	*2
ELBOWS . . . . . EACH	.42	.56	.70	1.00	1.70	2.20	3.30
ELBOWS, REDUCING . . . . . EACH	.52	.70	.90	1.25	2.20	2.80	3.80
ELBOWS, 45° . . . . . EACH	.50	.70	1.00	1.40	2.10	2.80	3.60
TEES . . . . . EACH	.60	.80	1.00	1.50	2.00	2.60	3.50
TEES, REDUCING . . . . . EACH	.76	1.00	1.25	1.90	2.50	3.30	4.40
CROSSES . . . . . EACH	.80	1.00	1.20	1.60	3.00	4.00	7.00
CROSSES, REDUCING . . . . . EACH	1.00	1.30	1.50	2.00	3.80	5.00	8.80
COUPLINGS . . . . . EACH	.32	.50	.75	1.00	1.20	1.80	2.70
COUPLINGS, REDUCING . . . . . EACH	.44	.64	.90	1.30	1.80	2.25	3.70
COUPLINGS, RIGHT AND LEFT . . . . . EACH	.36	.55	.82	1.10	1.35	2.00	3.10

*1¼, 1½, 2-inch are made only to order.

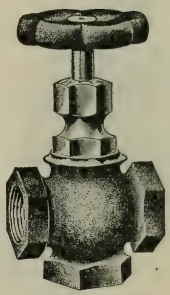
STANDARD BRASS VALVES.



C-1. GLOBE VALVE.



C-2. ANGLE VALVE.



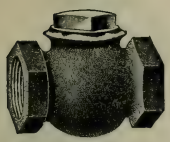
C-3. CROSS VALVE.

GLOBE AND ANGLE VALVES, SCREWED.—C-1 and C-2.

SIZE . . . . . INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
EACH	.72	.72	.77	1.00	1.26	1.80	2.52	3.50	5.30	10.00	14.40	26.50	36.00

CROSS VALVES, SCREWED.—C-3.

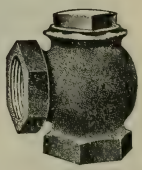
SIZE . . . . . INCHES	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
EACH	1.25	1.25	1.50	2.00	2.50	3.50	5.00	8.00	16.00	24.00



C-8. HORIZONTAL CHECK.



C-10. VERTICAL CHECK.

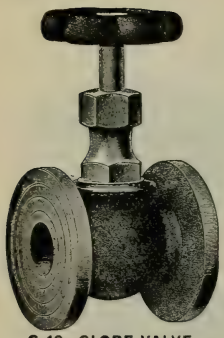


C-12. ANGLE CHECK.

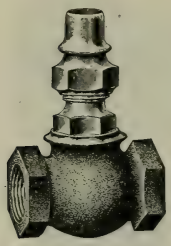
CHECK VALVES.—C-8, C-10 and C-12.

SIZE . . . . . INCHES	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
C-8 . . . . . EACH	.65	.65	.70	.90	1.15	1.60	2.25	3.15	4.75	9.00	13.00
C-10 AND C-12 . . . . . EACH	.72	.72	.77	1.00	1.26	1.80	2.52	3.50	5.30	10.00	14.40

BRASS VALVES.



C-16. GLOBE VALVE.



C-22. GLOBE VALVE.



C-23. ANGLE VALVE.

BRASS GLOBE, ANGLE AND CHECK VALVES, FLANGED.

SIZE . . . . . INCHES	1	1¼	1½	2	2½	3	3½	4
GLOBE AND ANGLE . . EACH	6.75	8.50	10.50	16.00	23.00	35.00	50.00	70.00
HORIZONTAL CHECK, EACH	6.50	8.25	10.15	15.50	22.00	33.50	47.50	66.50
DIAM. FLANGES. . . INCHES	4	4½	5	6	7	7½	8½	9

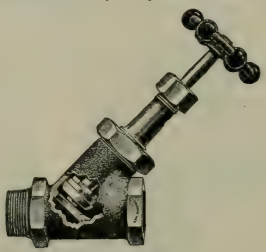
LOCK SHIELD VALVES.—C-22 and C-23.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½
ROUGH BODY, PLAIN . . . . . EACH	1.10	1.35	1.60	2.25	3.25	4.85
ROUGH BODY, N. P. ALL OVER . . . . . EACH	1.40	1.65	1.95	2.65	3.70	5.35

Keys, Plain, each, 20 cents. Finished and Nickel Plated, each, 50 cents.



C-28. SWINGING CHECK VALVE.



C-34. BRASS Y VALVE, O. AND I. THREAD.



C-35. BRASS Y VALVE, INSIDE THREAD.

SWINGING CHECK VALVES.—C-28.

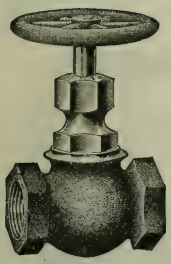
SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
HORIZONTAL . . . EACH	1.25	1.25	1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

BRASS STRAIGHTWAY BLOW-OFF OR Y VALVES.—C-34 and C-35.

SIZE. . . . . INCHES	¾	1	1¼	1½	2	2½
EACH	2.75	3.25	4.00	5.75	9.00	18.50

Unless otherwise specified, Y Valves will be sent with outside and inside threads as shown in C-34.

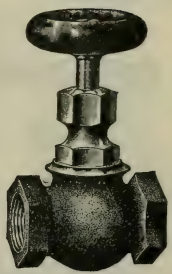
BRASS VALVES WITH JENKINS DISC.



C-42. GLOBE VALVE.



C-43. ANGLE VALVE



C-45. GLOBE VALVE, WOOD WHEEL.

GLOBE AND ANGLE VALVES WITH JENKINS DISC.—C-42 and C-43.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
EACH	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00

GLOBE AND ANGLE VALVES WITH JENKINS DISC, WOOD WHEEL.—C-45.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
ROUGH BODY, PLAIN . . . . . EACH	2.00	2.50	3.20	4.50	6.25	10.50
ROUGH BODY, PLATED TRIMMINGS . . . . . EACH	2.30	2.80	3.50	4.80	6.55	10.80
ROUGH BODY, PLATED ALL OVER . . . . . EACH	2.40	2.90	3.60	4.90	6.65	10.90
FINISHED ALL OVER . . . . . EACH	2.50	3.00	3.75	5.25	7.25	11.75
FINISHED AND PLATED ALL OVER . . . . . EACH	2.90	3.40	4.15	5.65	7.65	12.15



C-51. HORIZONTAL CHECK.



C-53. VERTICAL CHECK.



C-55. ANGLE CHECK.

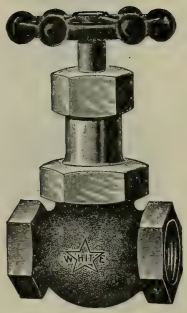
CHECK VALVES WITH JENKINS DISC.—C-51, C-53 and C-55.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
EACH	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	13.50	20.50

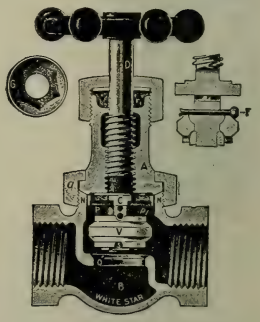
BRASS VALVES.

EXTRA HEAVY.

SUITABLE FOR A WORKING PRESSURE OF 200 POUNDS.



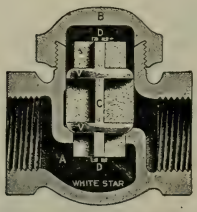
C-57. WHITE STAR GLOBE VALVE.



C-57. SECTIONAL VIEW.

WHITE STAR EXTRA HEAVY GLOBE AND ANGLE VALVES—C-57.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
SCREWED ENDS . . . . . EACH	1.60	1.85	2.20	3.05	4.30	5.90	8.50	12.75	20.75	30.70
FLANGED ENDS . . . . . EACH	4.00	4.60	5.10	5.85	7.50	10.90	14.00	20.50	30.00	42.70
DIAMETER OF FLANGES . . . INCHES	----	2½	3	3½	4	4½	5	6	7	7½



C-59. WHITE STAR CHECK VALVE.

EXTRA HEAVY CHECK VALVES, HORIZONTAL AND ANGLE—C-59.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
SCREWED ENDS . . . . . EACH	1.60	1.80	1.90	2.75	4.10	5.50	8.00	11.50	18.50	29.20
*FLANGED ENDS . . . . . EACH	----	----	----	5.60	7.00	9.70	12.80	19.00	27.80	41.10

*Diameter of Flanges, same as on Globe and Angle Valves, above.

Our High Pressure Valves are made of the best Steam Metal, with Bronze Metal Disc, and are warranted to give exceptionally good service under 200 pounds steam pressure.

These Valves are so constructed they can be re-ground without removing Valve from steam line and can be re-packed without shutting off steam.

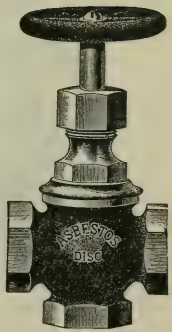
ASBESTOS DISC BRASS VALVES.



C-82. GLOBE VALVE.



C-83. ANGLE VALVE.



C-84. CROSS VALVE.

ASBESTOS DISC BRASS VALVES.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
C-82 AND C-83 . . . . . EACH	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
C-84 . . . . . EACH	----	----	2.25	2.50	3.25	4.75	6.25	9.50	20.00	30.00
EXTRA DISCS AND HOLDERS, COMPLETE EACH	.14	.07	.09	.10	.12	.18	25	36	.48	.60



C-92. RADIATOR VALVE, FEMALE.



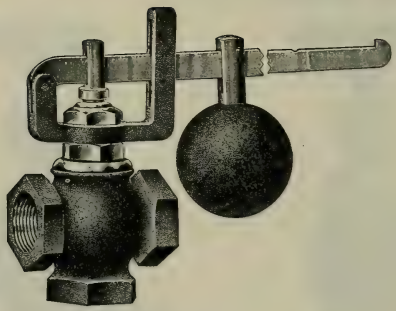
C-96. RADIATOR VALVE, WITH UNION.

ASBESTOS DISC RADIATOR VALVES.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
C-92. ROUGH BODY, N. P. ALL OVER . . . . EACH	2.85	3.65	4.90	6.75	11.00
C-96. ROUGH BODY, N. P. ALL OVER . . . . EACH	3.80	4.75	6.40	8.10	13.10

For Iron Body Asbestos Valves and Cocks see page 127.

BRASS VALVES.



C-125. SAFETY VALVE.



C-127. LOW-PRESSURE SAFETY VALVE.

SAFETY VALVES, STEAM METAL.—C-125.

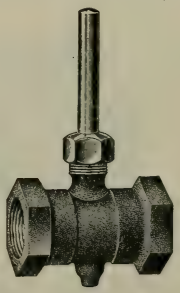
SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
BRASS DISC . . . . . EACH	2.20	2.50	3.25	3.90	4.70	7.15	9.00	12.50	22.50	33.50
JENKINS DISC . . . . . EACH	----	----	4.12	4.95	5.50	8.25	10.15	15.40	-----	-----

LOW PRESSURE SAFETY VALVES, STEAM METAL.—C-127.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
EACH	2.60	3.30	4.50	6.35	8.65



C-130. THROTTLE VALVE.



C-131. BUTTERFLY VALVE.

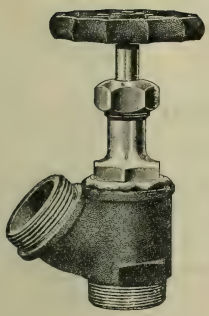


C-132. VACUUM VALVE.

THROTTLE, BUTTERFLY AND VACUUM VALVES.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
*THROTTLE VALVES, STEAM METAL, EACH	----	----	----	3.00	4.00	5.00	7.00	10.00	19.00	29.00
†BUTTERFLY VALVES . . . . . EACH	----	----	----	3.10	4.40	5.65	6.75	10.00	13.75	21.00
VACUUM VALVES . . . . . EACH	1.00	1.25	1.50	2.00	2.50	----	----	-----	-----	-----

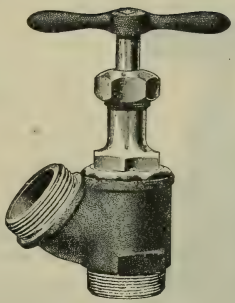
*Suitable for a working pressure of 175 pounds. For larger sizes with Iron Body see page 135.
† Butterfly Valves do not close steam or water tight.



C-136. HOSE VALVE, WHEEL HANDLE.

HOSE VALVES.

FOR
EDDY HOSE GATE VALVES
SEE PAGE 139.

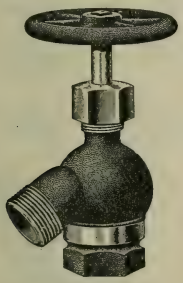


C-137. HOSE VALVE, TEE HANDLE.

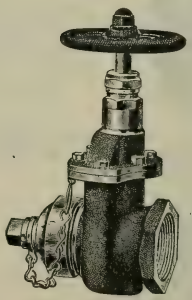
BRASS HOSE VALVES WITH LEATHER DISC.—C-136 and C-137.

SIZE . . . . . INCHES	1	1¼	1½	2	2½
ROUGH BODY, PLAIN . . . . . EACH	3.15	3.70	4.75	7.00	8.50
ROUGH BODY, NICKEL PLATED ALL OVER . . EACH	3.65	4.30	5.50	8.00	9.75
POLISHED BRASS ALL OVER . . . . . EACH	----	----	----	11.50	14.50

These Valves have standard iron pipe thread on bottom and Chicago standard hose thread on side, 1 to 2 inch inclusive. The 2½ inch has the Chicago Fire Department thread on side. Can be furnished with other threads than those specified when wanted.



C-138. GARDEN HOSE VALVE



C-140. SINGLE GATE HOSE VALVE.

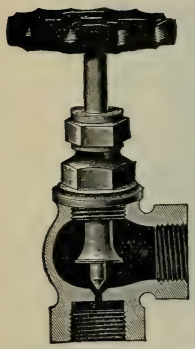
BRASS GARDEN HOSE VALVES WITH LEATHER DISC.—C-138.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
ROUGH BODY, FINISHED TRIMMINGS . . . . . EACH	1.65	1.65	2.20	3.40	4.75	7.00	12.00

These Valves have standard iron pipe thread on bottom, and are made with either Chicago or California hose thread on side. Can be furnished with other threads than those specified when so ordered.

SINGLE GATE HOSE VALVES.—C-140.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
WITH IRON CAP AND CHAIN . . . . . EACH	2.10	2.70	3.80	4.90	7.00	12.40	17.00
WITHOUT CAP AND CHAIN . . . . . EACH	1.70	2.20	3.20	4.20	6.20	11.50	16.00



C-141.
NEEDLE POINT VALVE.

GLOBE AND ANGLE VALVES. NEEDLE POINT.—C-141.

FOR REGULATING FUEL OIL FEED.

SIZE . . . . . INCHES	¼	⅜	½
GLOBE OR ANGLE VALVES . . . . . EACH	1.40	1.50	2.00
ANGLE VALVES WITH UNION AT SIDE . . . . EACH	2.00	2.20	3.00

These Valves are made to order only.
In ordering state size of opening for feed.



C-144.
LUNKENHEIMER
"HANDY" GATE VALVE.

*LUNKENHEIMER "HANDY" GATE VALVE.—C-144.

FOR PRESSURE NOT OVER 75 POUNDS.

SIZE . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	8
IRON BODY, BRASS MOUNTED . . EACH						7.00	12.00	15.00	18.00	21.00	25.00	30.00	35.00	65.00
BRASS BODY . EACH	1.60	1.80	2.50	3.50	5.00	7.50	13.50	19.00	40.00	60.00	----	----	----	----
ALL IRON . . EACH	----	3.40	4.00	4.50	6.00	7.00	12.00	15.00	18.00	21.00	25.00	30.00	35.00	65.00

*Screwed ends only; not made Flanged.

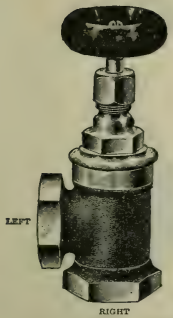
The discs are secured to the operating stem, and close against tapering seats. They have ball and socket bearings and are evenly wedged against the seats. When the valve is closed, the discs will not jar open. Can be operated at a distance by rod or rope.



C-145.
GAS LOG VALVE.

GAS LOG VALVE.—C-145.

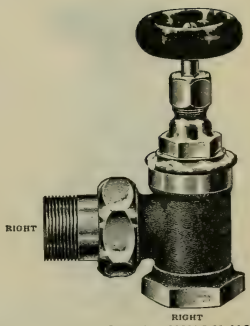
SIZE . . . . . INCHES	¼	⅜	½
PLAIN, WOOD WHEEL . . . . . EACH	1.60	1.75	2.00
PLAIN FINISHED BRASS WHEEL . . . . . EACH	2.10	2.25	2.50
NICKEL PLATED TRIMMINGS, WOOD WHEEL . EACH	1.85	2.00	2.25
NICKEL PLATED TRIMMINGS, BRASS WHEEL . EACH	2.35	2.50	2.75



C-147. FEMALE VALVE.

RADIATOR VALVES.

WHEN ORDERING,
GIVE SIZE AND NUMBER,
NOT DESCRIPTION.



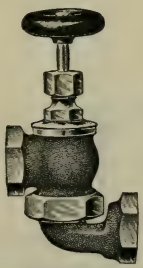
C-148. UNION VALVE.

QUICK-OPENING VALVES.—C-147 and C-148.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
NO. 1. HOT WATER, FEMALE, ROUGH BODY, PLATED TRIMMINGS . . . . EACH	1.85	2.40	3.60	4.85	7.25
NO. 2. HOT WATER, FEMALE, ROUGH BODY, PLATED ALL OVER . . . . EACH	1.95	2.65	3.70	5.00	7.75
NO. 3. HOT WATER, UNION, ROUGH BODY, PLATED TRIMMINGS . . . . EACH	2.60	3.35	4.90	6.65	10.25
NO. 4. HOT WATER, UNION, ROUGH BODY, PLATED ALL OVER . . . . EACH	2.85	3.65	5.05	7.10	10.85
NO. 5. STEAM, FEMALE, ROUGH BODY, PLATED TRIMMINGS . . . . . EACH	1.85	2.40	3.60	4.85	7.25
NO. 6. STEAM, FEMALE, ROUGH BODY, PLATED ALL OVER . . . . . EACH	1.95	2.65	3.70	5.00	7.75
NO. 7. STEAM, UNION, ROUGH BODY, PLATED TRIMMINGS . . . . . EACH	2.60	3.35	4.90	6.65	10.25
NO. 8. STEAM, UNION, ROUGH BODY, PLATED ALL OVER . . . . . EACH	2.85	3.65	5.05	7.10	10.85



C-149. RIGHT HAND.



C-149. OFFSET.



C-149. RETURN

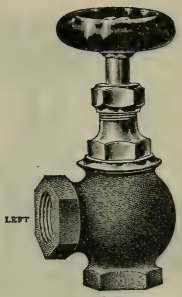
UNIVERSAL RADIATOR VALVES.—C-149.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
ROUGH BODY, PLAIN . . . . . EACH	3.05	3.85	4.75	6.45	8.55	13.85
ROUGH BODY, PLATED ALL OVER . . . . . EACH	3.45	4.25	5.15	6.95	8.95	14.25
FINISHED ALL OVER . . . . . EACH	3.50	4.40	5.30	7.05	9.65	15.25
FINISHED AND PLATED ALL OVER . . . . . EACH	3.90	4.80	5.70	7.45	10.05	15.65
CENTER TO CENTER (UNLESS OTHERWISE ORDERED) . . . INCHES	----	$1\frac{15}{16}$	$2\frac{1}{16}$	$2\frac{5}{16}$	$2\frac{7}{16}$	------

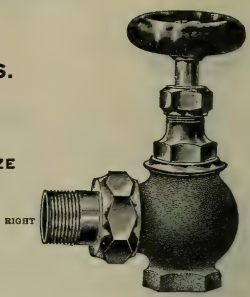
The Universal Radiator Valve (Patented) has a swinging joint which may be turned to connect in any direction; Right Hand, Left Hand, Offset, Return, 45° or any Angle. The above illustrations show three positions of the same Valve. It is made of best Steam Metal with all parts interchangeable and is fitted with renewable Disc.

RADIATOR VALVES.

WHEN ORDERING GIVE SIZE AND NUMBER, NOT DESCRIPTION.



C-150. FEMALE VALVE.

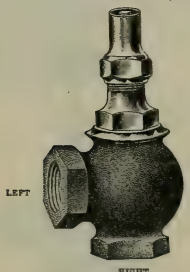


C-151. UNION VALVE.

RADIATOR VALVES, ROUGH BODY.—C-150 and C-151.

SIZE — INCHES	¾	1	1¼	1½	2
NO. 20. FEMALE VALVES, BRASS DISC, N. P. TRIMMINGS — EACH	1.85	2.40	3.60	4.85	7.25
NO. 21. FEMALE VALVES, BRASS DISC, N. P. ALL OVER — EACH	1.95	2.65	3.70	5.00	7.75
NO. 22. FEMALE VALVES, JENKINS DISC, N. P. TRIMMINGS — EACH	2.70	3.50	4.75	6.50	10.75
NO. 23. FEMALE VALVES, JENKINS DISC, N. P. ALL OVER — EACH	2.85	3.65	4.90	6.75	11.00
NO. 24. UNION VALVES, BRASS DISC, N. P. TRIMMINGS — EACH	2.60	3.35	4.90	6.65	10.25
NO. 25. UNION VALVES, BRASS DISC, N. P. ALL OVER — EACH	2.85	3.65	5.05	7.10	10.85
NO. 26. UNION VALVES, JENKINS DISC, N. P. TRIMMINGS — EACH	3.75	4.65	6.25	8.00	12.85
NO. 27. UNION VALVES, JENKINS DISC, N. P. ALL OVER — EACH	3.80	4.75	6.40	8.10	13.10

Radiator Valves can be furnished tapped differently, if specially ordered.



C-153. LOCK SHIELD VALVE, FEMALE.



C-154. RADIATOR KEY.



C-155. LOCK SHIELD VALVE, WITH UNION.

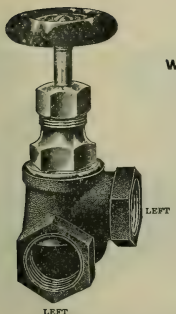
LOCK SHIELD RADIATOR VALVES, ROUGH BODY.—C-153 and C-155.

SIZE — INCHES	¾	1	1¼	1½	2
NO. 28. FEMALE VALVES, BRASS DISC, N. P. TRIMMINGS — EACH	1.85	2.40	3.60	4.85	7.25
NO. 29. FEMALE VALVES, BRASS DISC, N. P. ALL OVER — EACH	1.95	2.65	3.70	5.00	7.75
NO. 30. FEMALE VALVES, JENKINS DISC, N. P. TRIMMINGS — EACH	2.70	3.50	4.75	6.50	10.75
NO. 31. FEMALE VALVES, JENKINS DISC, N. P. ALL OVER — EACH	2.85	3.65	4.90	6.75	11.00
NO. 32. UNION VALVES, BRASS DISC, N. P. TRIMMINGS — EACH	2.60	3.35	4.90	6.65	10.25
NO. 33. UNION VALVES, BRASS DISC, N. P. ALL OVER — EACH	2.85	3.65	5.05	7.10	10.85
NO. 34. UNION VALVES, JENKINS DISC, N. P. TRIMMINGS — EACH	3.75	4.65	6.25	8.00	12.85
NO. 35. UNION VALVES, JENKINS DISC, N. P. ALL OVER — EACH	3.80	4.75	6.40	8.10	13.10

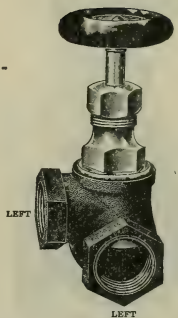
Nickel Plated Keys extra, each, 40 cents. Radiator Valves can be furnished tapped differently, if specially ordered.

RADIATOR VALVES.

WHEN ORDERING, STATE IF RIGHT OR LEFT-HAND VALVES ARE WANTED.



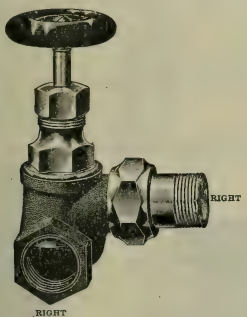
C-158. RIGHT-HAND CORNER VALVE.



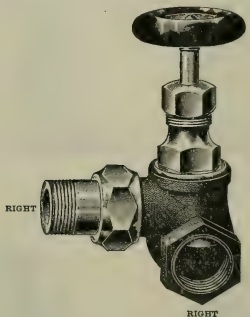
C-159. LEFT-HAND CORNER VALVE.

CORNER RADIATOR VALVES WITH JENKINS DISCS.—C-158 and C-159.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
JENKINS DISC, ROUGH BODY, NICKEL PLATED TRIMMINGS . EACH	3.00	3.85	5.25	7.25	11.85
JENKINS DISC, ROUGH BODY, NICKEL PLATED ALL OVER . EACH	3.15	4.00	5.50	7.50	12.10



C-160. RIGHT-HAND CORNER VALVE.



C-161. LEFT-HAND CORNER VALVE.

CORNER RADIATOR VALVES WITH UNION AND JENKINS DISCS.—C-160 and C-161.

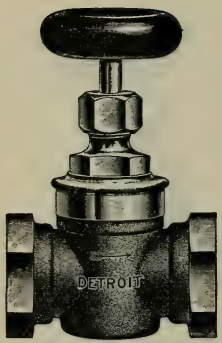
SIZE . . . . . INCHES	¾	1	1¼	1½	2
JENKINS DISC, ROUGH BODY, NICKEL PLATED TRIMMINGS . EACH	4.15	5.15	6.90	8.80	14.15
JENKINS DISC, ROUGH BODY, NICKEL PLATED ALL OVER . EACH	4.20	5.25	7.05	8.95	14.45



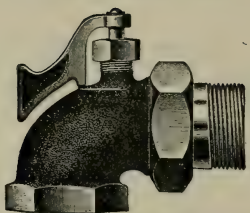
C-164. UNION ELBOW.

UNION RADIATOR ELBOWS.—C-164.

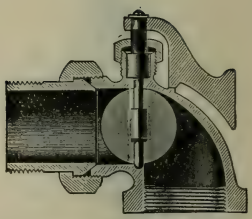
SIZE . . . . . INCHES	¾	1	1¼	1½	2
ROUGH BODY, PLATED ALL OVER . . EACH	1.50	1.85	2.40	3.15	4.80
FINISHED AND PLATED ALL OVER . . EACH	1.95	2.35	3.05	4.05	5.65



C-166. QUICK OPENING STRAIGHTWAY HOT WATER VALVE.



C-168. UNION ELBOW VALVE. FOR HOT WATER.



C-168. SECTIONAL VIEW.

*QUICK OPENING STRAIGHTWAY HOT WATER VALVES.—C-166.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
ROUGH BODY, N. P. TRIMMINGS . . . . . EACH	1.85	2.40	3.60	4.85	7.25
ROUGH BODY, N. P. ALL OVER . . . . . EACH	1.95	2.65	3.70	5.00	7.75
ROUGH BODY, N. P. TRIMMINGS, WITH UNION . . . . EACH	2.60	3.35	4.90	6.65	10.25
ROUGH BODY, N. P. ALL OVER, WITH UNION . . . . . EACH	2.85	3.65	5.05	7.10	10.85

*Threads right hand, both ends.

UNION ELBOW VALVES.—C-168.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
ROUGH BODY, N. P. ALL OVER, FINISHED TRIMMINGS . EACH	2.00	2.50	3.20	4.00	7.00



C-177. CLOW AUTO-POSITIVE.



C-178. VICTOR NO. 1.



C-179. VICTOR NO. 2.



C-184. ARGON.

AUTOMATIC AIR VALVES.

C-177	C-178	C-179	C-184
Nickel Plated . each, 1.00	Nickel Plated - each, .65	Nickel Plated - each, .65	Nickel Plated - each, 1.25



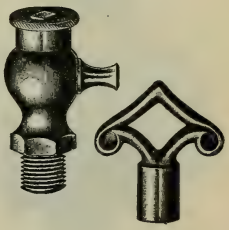
C-190.



C-191.



C-192.



C-193.

RADIATOR AIR VALVES. (1-8 inch only.)

FIGURE	C-190	C-191	C-192	C-193
NICKEL PLATED EACH	.35	.45	.70	.57
KEYS, NICKEL PLATED, EXTRA NET EACH	-------	-------	-------	.06



C-194.
FOR INDIRECT RADIATION.



C-195.
FOR DRAIN PIPE SYSTEM.



C-196.
WITH EVAPORATING CUP.



C-200.
POSITIVE OR AUTOMATIC.



C-203.
AUTOMATIC.



C-204.
LOCK SHIELD AND KEY.



C-205.
FOR HOT WATER.



C-206.
HEAT CONTROLLER ATTACHMENT.



C-211.
MARSH-PAUL VALVE.



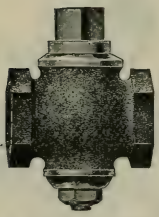
C-214.
DRAIN PIPE VALVE.

MARSH AUTOMATIC AIR VALVES.

FIGURE	C-194	C-195	C-196	C-200	C-203	C-204	C-205	C-206	C-211	C-214
NICKEL PLATED EACH	1.15	1.25	1.15	1.50	1.35	1.40	1.35	1.25	1.25	1.25

C-194 and C-195 we can furnish with wood wheels, if desired, without extra charge.

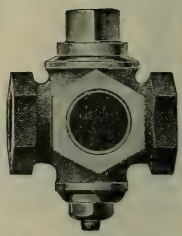
BRASS COCKS.



C-220. STEAM COCK, SQUARE HEAD.



C-221. STEAM COCK, FLAT HEAD.



C-224. THREE-WAY COCK.

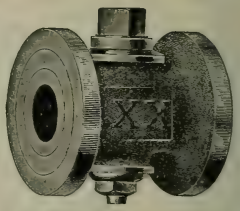
STEAM COCKS, STANDARD.

SIZE . . . . . INCHES	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
C-220, C-221 . . . . . EACH	.85	.85	1.00	1.25	1.70	2.35	3 70	4.85	7.30	14.50	22.50	38.50	50.00
C-220, C-221, WITH CHECK . . . EACH	1.00	1.00	1.15	1.40	1.90	2.55	3.95	5.15	7.65	15.00	23.25	----	----
C-224, THREE-WAY COCK . . EACH	----	----	----	2.50	3.00	3.75	5.75	7.15	11.00	18.75	26.00	50.00	70.00

Steam Cocks with square head will always be furnished unless otherwise ordered.



C-228. EXTRA HEAVY STEAM COCK.

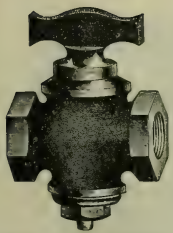


C-230. EXTRA HEAVY STEAM COCK, FLANGED.

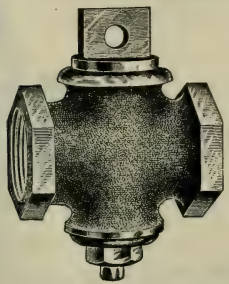
STEAM COCKS, EXTRA HEAVY.

SIZE . . . . . INCHES	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
C-228 . . . . . EACH	1.30	1.50	2.00	2.85	4.00	6.75	8.50	13.50	25.00	37.00	54.00	75.00
C-230 . . . . . EACH	----	----	----	----	10.00	14.25	17.25	27.00	41.00	63.00	84.00	120.00

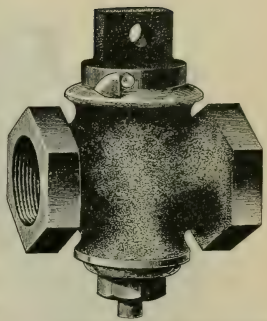
Iron Cocks, see page 131. Asbestos Cocks, see page 129



C-235. TEE HANDLE



C-236. FLAT HEAD.



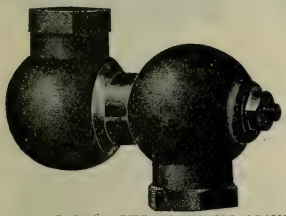
C-238. EXTRA HEAVY, WITH CHECK.

GAS SERVICE COCKS, TEE HANDLE.—C-235.

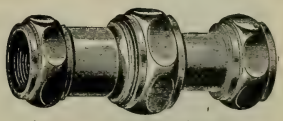
SIZE — INCHES	¼	⅜	½	¾	1
C-235 — EACH	.75	.85	.95	1.15	1.50
C-235. WITH CHECK — EACH	.90	1.00	1.45	1.75	2.50

GAS SERVICE COCKS, FLAT HEAD.—C-236 and C-238.

SIZE — INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
C-236 — EACH	.75	.85	.95	1.15	1.50	2.25	3.10	5.00	11.00	16.00
C-238. EXTRA HEAVY, WITH CHECK — EACH	----	----	1.45	1.75	2.50	3.25	4.75	7.50	-----	-----



C-242. STEAM SWING JOINT.



C-243. EXPANSION JOINT.

BRASS STEAM SWING JOINTS, ROUGH.—C-242.

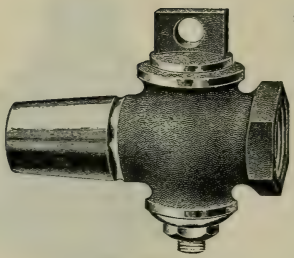
SIZE — INCHES	⅜	½	¾	1	1¼	1½	2
EACH	1.25	1.75	2.40	3.50	4.50	6.25	9.00

BRASS EXPANSION JOINTS.—C-243.

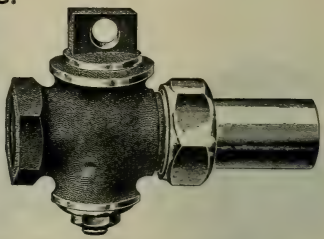
SIZE — INCHES	¼	¾	1	1¼	1½	2	2½	3
STANDARD TRAVERSE — INCHES	2	2¼	2¼	2¼	2¼	2½	2½	2¾
EACH	1.50	2.20	2.75	4.00	5.00	8.00	17.50	24.00
EASTERN TRAVERSE — INCHES	4	4	4	4	4	4	5	5
EACH	3.80	4.00	4.90	6.30	7.40	9.10	20.00	28.00

When used for high-pressure steam, the expansion is 1 inch in 50 feet of pipe. Longer Traverse to order.

BRASS COCKS.



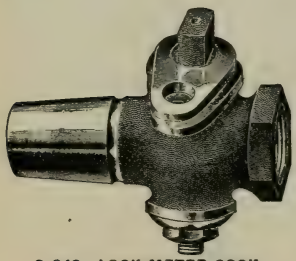
C-246. METER COCK.



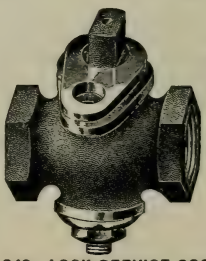
C-247. UNION METER COCK.

GAS METER COCKS, FLAT HEAD.—C-246 and C-247.

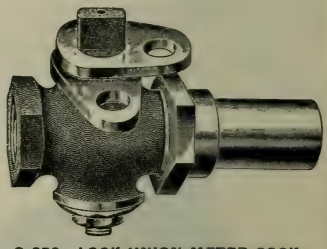
SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
C-246 . . . . . EACH	1.30	1.40	1.95	3.00	4.25	6.00
C-247 . . . . . EACH	1.40	1.55	2.20	3.40	5.00	7.00



C-248. LOCK METER COCK.



C-249. LOCK SERVICE COCK.



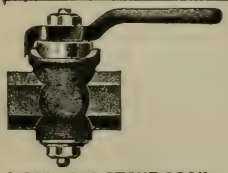
C-250. LOCK UNION METER COCK.

LOCK METER COCKS.—C-248 and C-250.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
C-248 . . . . . EACH	1.40	1.75	2.30	3.85	5.50	7.75
C-250 . . . . . EACH	1.50	1.80	2.50	4.00	5.50	8.00

LOCK GAS SERVICE COCKS, FLAT HEAD.—C-249.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2
EACH	1.30	1.60	2.10	3.50	5.00	7.00

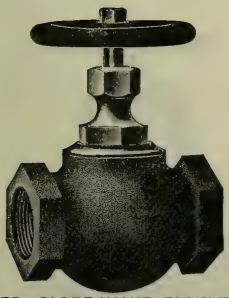


C-254. GAS STOVE COCK.

GAS STOVE COCKS, ROUNDWAY.—C-254.

SIZE . . . . . INCHES	½	¾	1
WITHOUT CHECK . . . . . EACH	1.25	2.00	3.00
WITH CHECK . . . . . EACH	1.35	2.15	3.25

STANDARD IRON-BODY VALVES.



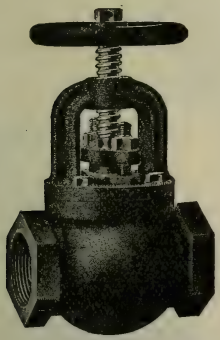
C-375. GLOBE VALVE, PLAIN TOP.



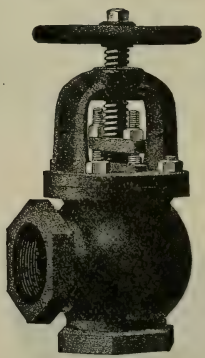
C-376. ANGLE VALVE, PLAIN TOP.

IRON-BODY GLOBE AND ANGLE VALVES, PLAIN TOP.

SIZE . . . . . INCHES	1	1¼	1½	2	2½	3
SCREWED ENDS . . . . . EACH	2.25	2.75	3.50	5.40	7.35	9.80
FLANGED ENDS . . . . . EACH	----	----	----	7.00	9 00	12.50



C-377. GLOBE VALVE, YOKE TOP.

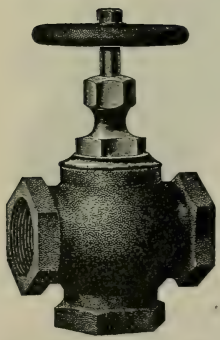


C-378. ANGLE VALVE, YOKE TOP.

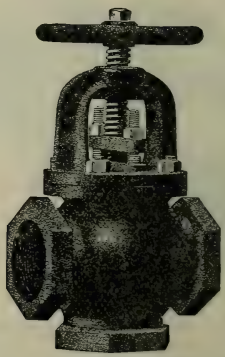
IRON-BODY GLOBE AND ANGLE VALVES, SCREWED ENDS, WITH YOKE TOP.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½
EACH	7.00	9.00	12.50	15.25	19.00	24.00
AVERAGE WEIGHT . . . . . POUNDS	13	16	25	41	57	70
SIZE . . . . . INCHES	5	6	7	8	10	12
EACH	27.00	37.50	63.00	72.00	114.00	170.00
AVERAGE WEIGHT . . . . . POUNDS	87	123	174	239	425	----

STANDARD IRON-BODY VALVES.



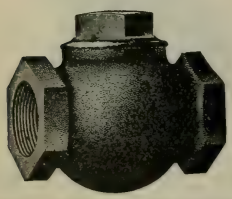
C-379. CROSS VALVE, PLAIN TOP.



C-380. CROSS VALVE, YOKE TOP.

IRON-BODY CROSS VALVES, SCREWED AND FLANGED ENDS.

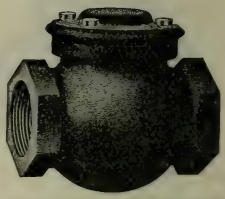
SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
PLAIN TOP, SCREWED . . EACH	6.50	9.00	12.50	----	----	----	----	----	----	-----	-----	-----
YOKE TOP, SCREWED . . EACH	8.50	11.75	16.25	20.00	23.50	30.65	35.25	47.25	78.00	92.00	162.00	240.00
PLAIN TOP, FLANGED . . EACH	9.00	11.75	16.50	----	----	----	----	----	----	-----	-----	-----
YOKE TOP, FLANGED . . EACH	11.00	14.50	20.00	25.00	28.50	36.00	41.00	54.00	85.00	100.00	175.00	265.00



C-385. HORIZONTAL CHECK.



C-386. ANGLE CHECK.

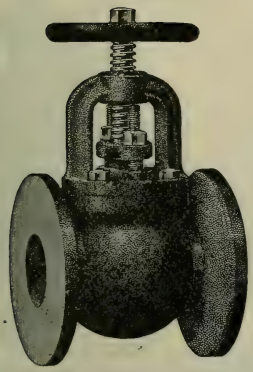


C-388. SWING CHECK VALVE.

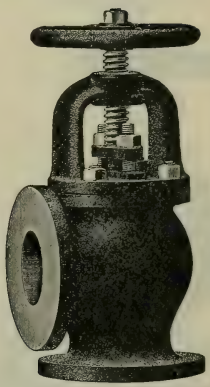
IRON-BODY CHECK VALVES, SCREWED AND FLANGED ENDS.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10
C-385, C-386, SCREWED . . . . . EACH	3.60	6.50	8.90	12.25	14.25	19.00	22.00	30.00	45.00	57.00	105.00
C-385, C-386, FLANGED . . . . . EACH	5.25	8.25	11.50	15.50	18.00	22.50	26.00	35.00	50.00	62.00	115.00
C-388, SCREWED . . . . . EACH	----	15.00	18.00	24.00	27.00	----	38.00	48.00	62.00	75.00	125.00
C-388, FLANGED . . . . . EACH	----	17.00	21.00	27.00	30.00	----	42.00	52.00	67.00	80.00	135.00

STANDARD IRON-BODY VALVES.



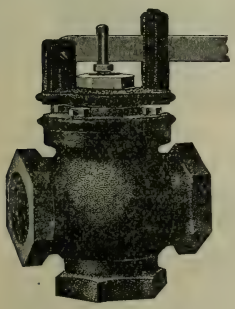
C-392. GLOBE VALVE, FLANGED ENDS.



C-393. ANGLE VALVE, FLANGED ENDS.

IRON-BODY GLOBE AND ANGLE VALVES, FLANGED ENDS.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
DIAMETER OF FLANGES	6	7	7½	8½	9	9½	10	11	12½	13½	16	19
EACH	8.60	10.75	15.00	18.50	22.50	27.50	31.00	42.00	68.00	77.00	123.00	187.00



C-394.
SAFETY VALVE.

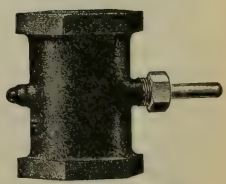
IRON-BODY SAFETY VALVES.

SIZE. . . . . INCHES	1¼	1½	2	2½	3	3½	4	4½	5	6
GLOBE . . . . . EACH	5.00	5.80	7.80	13.25	17.25	23.00	28.75	34.50	41.50	57.75
ANGLE . . . . . EACH	5.00	5.80	7.80	13.25	17.25	23.00	28.75	34.50	41.50	57.75
GLOBE OR ANGLE, FLANGED ENDS, EACH	6.75	7.75	10.25	16.00	21.50	27.50	34.00	40.00	48.00	65.00

IRON-BODY BUTTERFLY VALVES.—C-395.

SIZE . . . . . INCHES	1¼	1½	2	2½	3	3½	4	5	6
SCREWED . . . . . EACH	6.35	7.00	8.00	9.50	12.00	16.00	18.50	28.50	42.50
FLANGED . . . . . EACH	7.50	8.50	9.50	11.50	15.00	19.00	22.00	32.00	47.00

Butterfly Valves do not close steam or water tight.

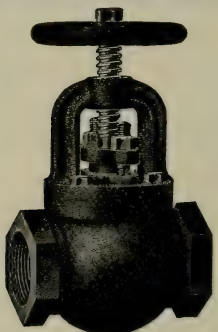


C-395. BUTTERFLY VALVE.

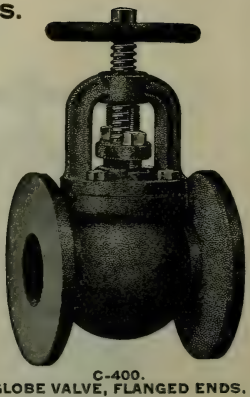
JENKINS DISC IRON-BODY VALVES.



C-396.
GLOBE VALVE, PLAIN TOP.



C-398.
GLOBE VALVE, YOKE TOP.



C-400.
GLOBE VALVE, FLANGED ENDS.

JENKINS DISC IRON-BODY GLOBE AND ANGLE VALVES.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
PLAIN TOP, SCREWED . . . EACH	7.25	11.00	16.00	----	----	----	----	----	----	----	----	----
YOKE TOP, SCREWED . . . EACH	10.00	12.00	16.75	19.50	24.00	32.00	40.00	48.00	80.00	90.00	130.00	185.00
PLAIN TOP, FLANGED . . . EACH	8.50	13.00	18.00	----	----	----	----	----	----	----	----	----
YOKE TOP, FLANGED . . . EACH	11.75	14.00	18.50	21.50	26.00	34.00	42.00	50.00	80.00	90.00	130.00	185.00

DIMENSIONS OF IRON-BODY VALVES WITH JENKINS DISC.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
DIAMETER OF FLANGES	6	7	7½	8½	9	9½	10	11	12½	13½	16	19
FACE TO FACE GLOBE VALVES . .	6	7½	9¼	10	11¾	12½	13	16	16	18½	21¼	24½
CENTER TO FACE ANGLE VALVES .	3½	4½	4⅝	5⅜	5⅞	6¼	6½	8	8½	9¼	11	12¾

JENKINS DISC IRON-BODY CHECK VALVES.

SIZE . . . . . INCHES	2½	3	3½	4	5	6
SCREWED ENDS . . . . . EACH	10.50	14.00	17.00	20.00	30.00	40.00
FLANGED ENDS . . . . . EACH	12.50	16.50	20.00	23.00	33.00	43.00

JENKINS DISC IRON-BODY CROSS VALVES.

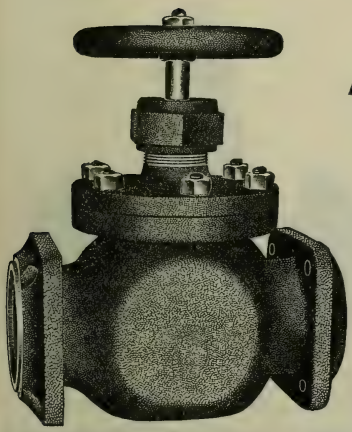
SIZE . . . . . INCHES	2½	3	3½	4	4½	5	6
SCREWED ENDS . . . . . EACH	16.00	21.00	26.00	30.00	42.00	45.00	58.00
FLANGED ENDS . . . . . EACH	19.00	24.00	29.00	33.00	45.00	48.00	62.00

JENKINS DISCS.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½
EACH	.03	.04	04	.05	.06	.09	.12	.18	.24

SIZE . . . . . INCHES	3	3½	4	5	6	7	8	10	12
EACH	.33	.45	.52	.68	.90	.98	1.20	1.75	2.25

All our Valves are tested to 200 pounds, and are always supplied with stems, packed ready for use, without extra charge.

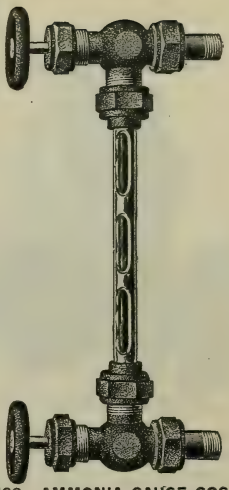


C-401. SQUARE FLANGE AMMONIA VALVE.

AMMONIA VALVES.

SEMI-STEEL.

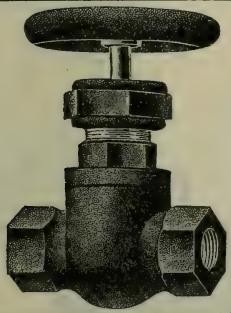
C-402. AMMONIA GAUGE COCKS.—Should Glass break, Cock will close automatically, preventing escape of ammonia. Each, $15.00.



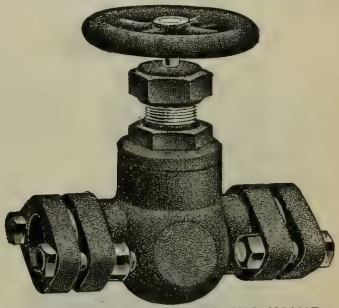
C-402. AMMONIA GAUGE COCK.

SEMI-STEEL SQUARE FLANGE AMMONIA VALVES.—C-401.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	5
LENGTH, FACE TO FACE . . . . . INCHES	8½	8½	8½	8½	8½	12	12	13	14	15
SIZE FLANGE, OUTSIDE . . . . . INCHES	4¼	4¼	4½	4½	4½	5½	6	6½	7	8
WITHOUT COMPANION FLANGES, BOLTS AND GASKETS, EACH	12.50	14.00	17.50	21.00	22.50	30.00	40.00	50.00	75.00	90.00
WITH COMPANION FLANGES, BOLTS AND GASKETS . . EACH	16.50	18.00	21.50	25.00	26.50	39.00	50.00	62.00	90.00	110.00



C-403. SCREWED AMMONIA VALVE.

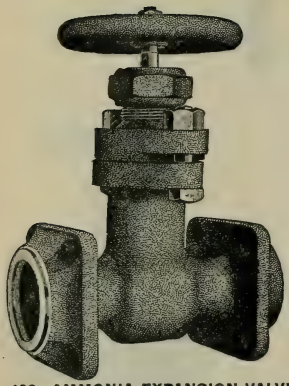


C-404. GLAND END AMMONIA VALVE.

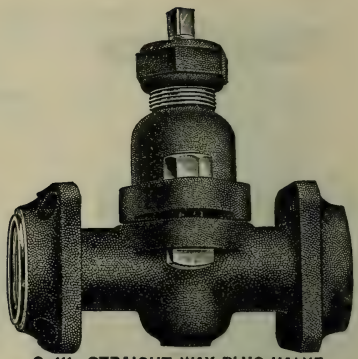
SEMI-STEEL AMMONIA VALVES.—C-403 and C-404.

SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
LENGTH, END TO END . . . . . INCHES	4½	4½	4½	5½	5½	6¼	7	8½	10	12
LARGE DIAMETER OF GLAND . . . . . INCHES	3⅜	3⅜	3⅜	4⅜	4⅜	5⅛	5½	6	--	--
SMALL DIAMETER OF GLAND . . . . . INCHES	1⅞	1⅞	1⅞	2¼	2½	2⅝	3¼	3½	4¾	5¾
C-403. SCREWED ENDS . . . . . EACH	3.00	4.00	5.00	6.00	7.25	8.00	9.00	12.50	18.00	22.50
C-404. GLAND ENDS . . . . . EACH	3.00	4.00	5.00	6.50	8.00	9 80	11.80	17.00	22 00	29 00

Ammonia Fittings, pages 67 to 69.



C-409. AMMONIA EXPANSION VALVE.



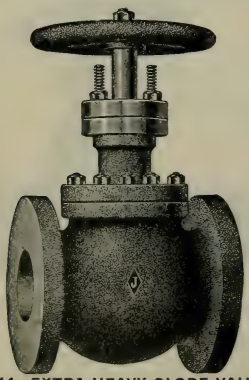
C-411. STRAIGHT-WAY PLUG VALVE.

SQUARE FLANGE AMMONIA EXPANSION VALVES.—C-409.

FACE TO FACE, INCHES	SIZE FLANGE, INCHES	WITHOUT COMP. FLANGES, BOLTS AND GASKETS	WITH COMP. FLANGES, BOLTS AND GASKETS
$8\frac{1}{2}$	$4\frac{1}{2}$	12.00	15.00

SQUARE FLANGE, STRAIGHT-WAY, FULL OPENING PLUG VALVES. C-411.

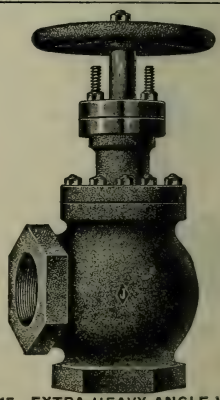
SIZE . . . . . INCHES	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5
FACE TO FACE . . . . . INCHES	$8\frac{1}{2}$	$8\frac{1}{2}$	$8\frac{1}{2}$	$8\frac{1}{2}$	$8\frac{1}{2}$	12	12	13	14	15
SIZE FLANGE, OUTSIDE . . . . . INCHES	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7	8
WITHOUT COMP. FLANGES, BOLTS AND GASKETS . . . EACH	12.50	14.00	17.50	21.00	22.50	30.00	40.00	50.00	75.00	90.00
WITH COMP. FLANGES, BOLTS AND GASKETS . . . . EACH	16.50	18.00	21.50	25.00	26.50	39.00	50.00	62.00	90.00	110.00



C-414. EXTRA HEAVY GLOBE VALVE.

SUITABLE FOR A WORKING PRESSURE OF 200 POUNDS.

Ammonia Fittings, pages 67 to 69.



C-415. EXTRA HEAVY ANGLE VALVE.

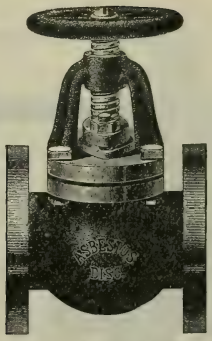
EXTRA HEAVY GLOBE AND ANGLE VALVES.—C-414 and C-415.

SIZE . . . . . INCHES	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8	10	12
SCREWED ENDS . . . . . EACH	10.50	14.50	18.00	21.00	28.00	32.00	44.00	75.00	85.00	135.00	200.00
FLANGED ENDS . . . . . EACH	12.50	17.50	21.50	25.00	32.00	36.00	49.00	80.00	91.00	145.00	220.00
DIAMETER OF FLANGES . . . . INCHES	$7\frac{1}{2}$	$8\frac{1}{2}$	9	10	$10\frac{1}{2}$	11	12	$13\frac{1}{2}$	15	$17\frac{1}{2}$	20

SPECIAL IRON-BODY VALVES



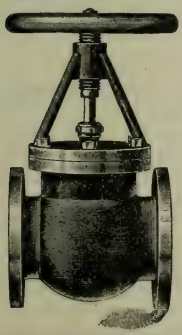
C-438. GLOBE VALVE, PLAIN TOP.



C-439. GLOBE VALVE, YOKE TOP

ASBESTOS DISC GLOBE AND ANGLE VALVES.

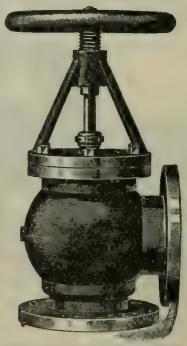
SIZE . . . . . INCHES	2	2½	3	3½	4	5	6	7	8	10	12
SCREWED, PLAIN TOP . . . . . EACH	7.25	11.00	16.00	18.50	23.00	-----	-----	-----	-----	-----	-----
FLANGED, PLAIN TOP . . . . . EACH	8.50	13.00	18.00	20.50	25.00	-----	-----	-----	-----	-----	-----
SCREWED, YOKE TOP . . . . . EACH	10.00	12.00	16.75	19.50	24.00	40.00	48.00	80.00	90.00	130.00	185.00
FLANGED, YOKE TOP . . . . . EACH	11.75	14.00	18.50	21.50	26.00	42.00	50.00	80.00	90.00	130.00	185.00



C-442. GARDNER FLANGED GLOBE VALVE.

GARDNER IMPROVED IRON BODY VALVES.

The Gardner Improved Angle and Globe Valves were designed especially for steam engines to be used either in connection with Gardner Governors or for automatic engines where something of a high quality is desired. They are made extra heavy and give full area of openings. The stems are non-revolving; valves and seats are of phosphor bronze; flanges are all finished; angle valves above five inches and globe valves above seven inches have bronze relief valves. The smaller sizes are neatly japanned to correspond in finish with our governors. All parts are made interchangeable.



C-444. GARDNER FLANGED ANGLE VALVE.

GARDNER IMPROVED IRON BODY VALVES.—C-442 and C-444.

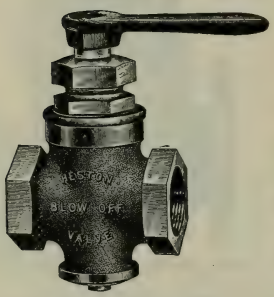
SIZE . . . . . INCHES	2	2½	3	3½	4	5	6	7	8	10	12
PRICE C-442, C-444 . . . . . EACH	9.75	12.50	18.00	22.00	25.00	38.00	50.00	80.00	103.00	180.00	275.00
DIAMETER OF FLANGES . . . . . INCHES	6	7	8	9	10	11	13	14	15	17	18
FACE TO FACE OF FLANGES ON GLOBE VALVES . INCHES	7½	8½	9½	10½	11	12½	14	17	19	24	28½
CENTER TO FACE OF FLANGES ON ANGLE VALVES INCHES	3½	4½	5	5½	6½	7	8½	9½	10	11¾ / 11¼	12

Valves will be sent with screwed inlets when so desired.

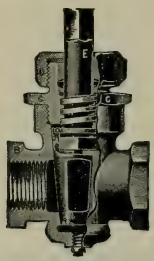
HESTON BALANCED PLUG VALVES.

BRASS OR IRON.

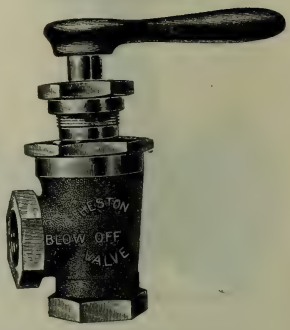
ADAPTED FOR STEAM, AIR, HYDRAULIC AND HIGHEST PRESSURES.



C-455. HESTON STRAIGHTWAY BLOW-OFF VALVE.



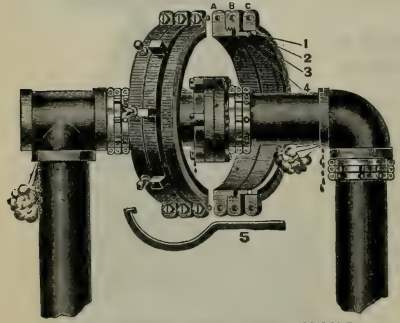
HESTON VALVE. SECTIONAL VIEW.



C-457. HESTON ANGLE VALVE.

The Heston is a thoroughly high class Valve, especially adapted for high pressures. It is simple in construction, is absolutely tight and will not stick or work open. A quarter turn opens or closes it.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
STANDARD, 200 POUNDS PRESSURE . . . . . EACH	1.50	2.00	2.80	4.25	6.00	10.50	17.50	29.00
EXTRA HEAVY, 500 POUNDS PRESSURE . . . . EACH	2.80	4.10	5.90	7.60	10.00	14.40	29.75	46.00
HYDRAULIC, 1500 POUNDS PRESSURE . . . . . EACH	7.00	9.75	15.75	20.60	29.00	46.60	75.00	120.00
EXTRA HYDRAULIC, 2000 POUNDS PRESSURE . . EACH	9.10	12.60	20.70	27.10	38.50	62.70	97.60	157.00



C-460. CLIMAX STEAM JOINT CLAMP.

A.—Rigid Clamp held firmly to pipe by set screws.

B.—Loose Clamp, when forced away from [A] forces with blank face packing through clamp [C] to joint.

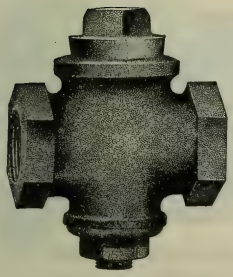
C.—Loose Clamp holding packing and follower ring.

1. Represents a ring of packing.
2. Represents follower ring.
3. Represents blank face in B.
4. Represents male and female threads in [A] and [B].
5. Represents spanner.

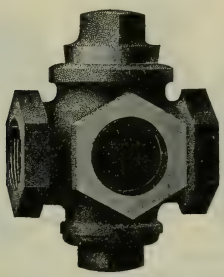
This Clamp is made in halves and held together by cap screws, and can be easily attached to pipe, an efficient means for stopping leaks.

CLAMPS FOR PIPE, SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5
EACH	1.50	1.50	1.90	2.25	3.00	3.75	4.50	5.25	6.00	6.75	7.50
CLAMPS FOR PIPE, SIZE . . . . . INCHES	6	7	8	9	10	12	14	15	16	18	20
EACH	9.00	10.50	13.00	15.75	18.75	22.50	31.50	33.75	36.00	40.50	45 00

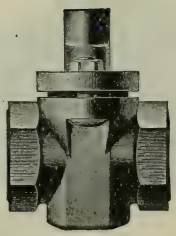
In ordering, state Size of Pipe and whether to be used for Steam, Water, Air, Gas, or Ammonia.



C-465. IRON COCK.



C-467. THREE-WAY IRON COCK.



C-469. ASBESTOS PACKED COCK.

IRON COCKS.—C-465.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
ALL IRON . . . . . EACH	.90	1.05	1.30	1.60	1.95	2.70	4.40	6.75	12.00	15.50	32.00	45.00
WITH BRASS PLUG AND WASHER . . . . EACH	1.40	1.75	2.15	3.00	4.15	5.75	9.50	14.00	29.50	40.00	73.00	102.00
ALL IRON, FLANGED . . . . . EACH	----	----	2.25	2.75	3.25	4.25	6.25	9.50	15.00	19.00	36.00	50.00
BRASS PLUG AND WASHER, FLANGED . . EACH	----	----	3.25	4.10	5.40	7.50	11.25	16.75	32.00	43.50	76.00	108.00

THREE-WAY IRON COCKS.—C-467.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4
ALL IRON . . . . . EACH	1.65	1.80	2.05	2.65	3.65	5.35	7.50	14.00	19.00
WITH BRASS PLUG AND WASHER . . . . . EACH	2.35	2.65	3.45	4.90	6.75	10.50	14.75	32.00	43.50
ALL IRON, FLANGED . . . . . EACH	----	3.75	4.25	5.25	7.00	9.00	12.75	20.00	26.00
WITH BRASS PLUG AND WASHER, FLANGED . . . . EACH	----	4.75	5.60	7.40	10.00	14.00	20.00	38.00	50.50

EXTRA HEAVY IRON COCKS (NOT ILLUSTRATED).

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
ALL IRON . . . . . EACH	1.15	1.25	1.75	2.10	2.80	3.65	6.50	9.00	16.75	22.50	45.00	62.00
WITH BRASS PLUG AND WASHER . . . . EACH	1.80	2.40	3.05	4.20	6.00	7.50	14.00	20.00	44.00	59.50	104.00	141.00

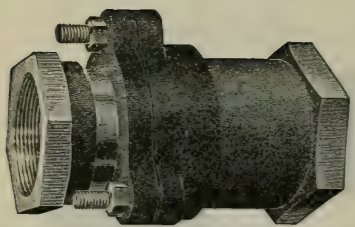
EXTRA HEAVY THREE-WAY IRON COCKS (NOT ILLUSTRATED).

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	5	6
ALL IRON . . . . . EACH	1.80	2.50	2.80	3.90	5.60	8.40	12.00	21.00	28.00	56.00	77.00
WITH BRASS PLUG AND WASHER . . . . . EACH	2.95	3.75	4.85	7.15	9.75	16.25	23.00	48.00	65.50	113.00	154.00

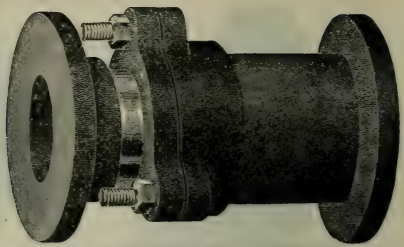
Brass Three-way Cocks can also be furnished. Prices upon application.

ASBESTOS PACKED IRON COCKS.—C-469.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
C-469. SCREWED ENDS . . . EACH	1.60	2.10	2.50	3.50	4.75	7.00	12.00	18.00	27.00	30.00	45.00	60.00
C-469. FLANGED ENDS . . . EACH	----	----	2.50	3.50	4.75	7.00	12.00	18.00	27.00	30.00	45.00	60.00
WITH GLAND . . . . . EACH	2.45	3.10	3.65	4.75	6.10	8.65	-----	-----	-----	-----	-----	-----
3-WAY COCKS . . . . . EACH	2.85	3.15	4.40	5.95	8.75	15.00	22.50	33.75	37 50	56.25	75.00	-----



C-472. EXPANSION JOINT, SCREWED ENDS.



C-473. EXPANSION JOINT, FLANGED ENDS.

IRON-BODY EXPANSION JOINTS, STANDARD TRAVERSE.

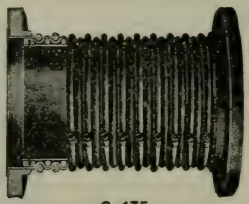
SIZE . . . . . INCHES	2	2½	3	3½	4	5	6	7	8	9	10	12
TRAVERSE . . . . . INCHES	2½	2½	2¾	3	3¼	4	5	6	7	7	7	8
SCREWED ENDS . . . . . EACH	7.00	8.00	10.00	14.00	18.00	38.00	45.00	70.00	100.00	110.00	160.00	225.00
FLANGED ENDS . . . . . EACH	15.00	16.00	18.50	25.00	30.00	48.00	55.00	80.00	110.00	120.00	175.00	250.00
DIAMETER OF FLANGES . . INCHES	5	7	7½	8½	9	10	11	12½	13½	15	16	19

When used for high-pressure steam, the expansion is 1 inch in 50 feet of pipe.

IRON-BODY EXPANSION JOINTS, SPECIAL TRAVERSE.

TRAVERSE	SIZE . . . . . INCHES	2	2½	3	3½	4	5	6	7
6 INCHES	SCREWED ENDS . . . EACH	11.00	13.00	17.50	25.00	30.00	45.00	55.00	70.00
10 INCHES	SCREWED ENDS . . . EACH	16.00	19.00	25.00	35.00	42.00	62.00	80.00	100.00
12 INCHES	SCREWED ENDS . . . EACH	18.50	22.00	29.00	40.00	48.00	70.00	92.50	115.00
14 INCHES	SCREWED ENDS . . . EACH	21.00	25.00	33.00	45.00	54.00	78.00	-----	------
16 INCHES	SCREWED ENDS . . . EACH	23.50	28.00	37.00	50.00	60.00	86.00	-----	------

Special Traverse Expansion Joints, Flanged Ends, Special.

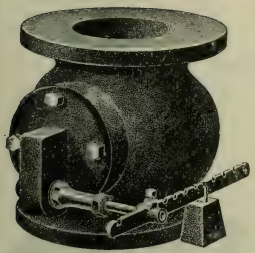


C-475.

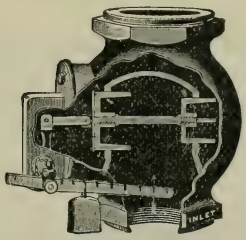
WAINWRIGHT CORRUGATED COPPER EXPANSION JOINTS.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12	14
LENGTH OF JOINT . . . INCHES	12	12	12	16	16	16	16	18	18	18	24	24	30
DIAMETER OF FLANGES . INCHES	6	7	8	8	9	10	10	11	13	14½	18	20	22
MAXIMUM MOVEMENT . . INCHES	2	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½
C-475 . . . . . EACH	30.00	35.00	40.00	45.00	50.00	55.00	60.00	75.00	90.00	125.00	165.00	225.00	300.00

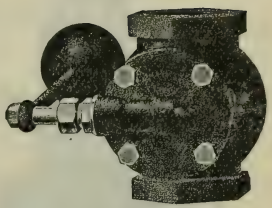
This Joint is a combination of the very best copper in the form of corrugated tubing, and strong, fine-grained cast-iron flanges. When these joints are put in according to our directions, we guarantee them to the fullest extent, and stand ready to make good our claim that this is the only thoroughly satisfactory joint now upon the market. We cannot undertake to give general directions which will surely fit every case; we must therefore ask our customers in making inquiries to submit all conditions under which joint is to operate.



C-480.
DAVIS' BACK-PRESSURE VALVE.



C-480.
SECTIONAL.



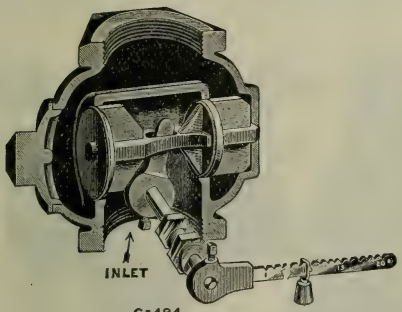
C-482.
BACK-PRESSURE VALVE.

DAVIS' NOISELESS BACK-PRESSURE VALVES.—C-480.

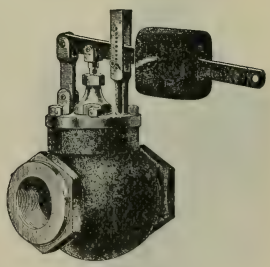
SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7
SCREWED OR FLANGED ENDS . . . . . EACH	14.00	16.00	18.00	22.00	25.00	30.00	40.00	60.00	80.00
SIZE . . . . . INCHES	8	10	12	14	16	18	20	22	24
FLANGED . . . . . EACH	100.00	145.00	220.00	345.00	465.00	600.00	750.00	900.00	1050 00
DIAMETER OF FLANGE . INCHES	13½	16	19	21	23½	25	27½	29	32

IRON-BODY BACK-PRESSURE VALVES.—C-482.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED ENDS . . . . . EACH	11.00	13.00	15.00	19.00	22.50	28.50	33.50	43.00	70.00	85.00	120.00	180.00
FLANGED ENDS . . . . . EACH	12.75	15.00	17.50	22.00	26.00	32.00	37.00	47.00	75.00	90.00	130.00	200.00



C-484.



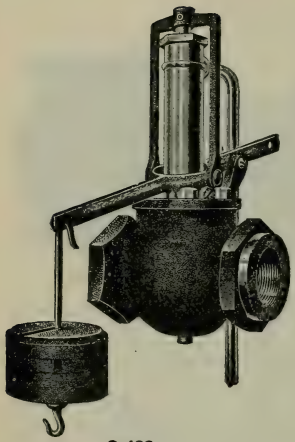
C-486.

HENNEBOEHLE'S NOISELESS BACK-PRESSURE VALVES.—C-484.

SIZE . . . . . INCHES	2½	3	4	5	6	7	8	10	12	14	16	18
EACH	16.00	18.00	26.00	40.00	58.00	78.00	98.00	142.00	215.00	340.00	460.00	590.00

DAVIS' BALANCE VALVES. For Steam, Gas, Air or Water.—C-486.

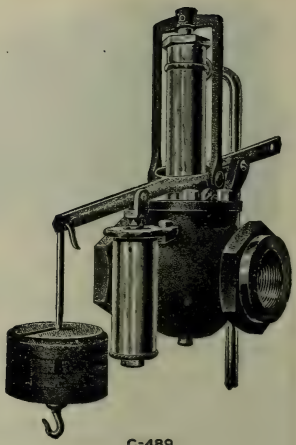
SIZE . . . . . INCHES	½	¾	1	1½	2	2½	3	3½	4	5	6	7	8
BRASS . . . . . EACH	5.50	6.50	8.00	9.50	-----	-----	-----	-----	-----	-----	-----	-----	-----
IRON-BODY . . . . . EACH	----	----	----	11.00	14.00	18.00	25.00	30.00	35.00	45.00	55.00	65.00	75.00



C-488.

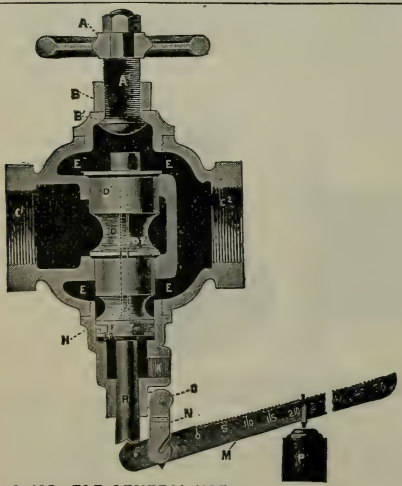
DAVIS PRESSURE REGULATORS.

FOR STEAM, AIR OR WATER.

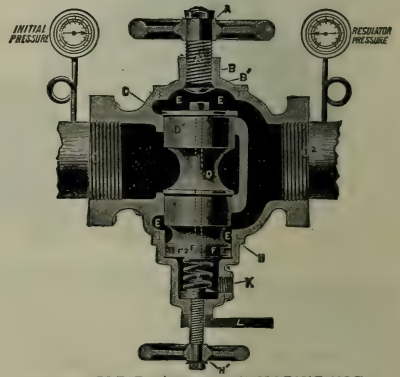


C-489.

SIZE - - - - - - - - INCHES	¾	1	1¼	1½	2	2½	3	3½	4	5	6	7	8	10	12
C-488 - - - - - - - EACH	20.00	22.00	24.00	25.00	30.00	35.00	40.00	50.00	60.00	75.00	100.00	135.00	175.00	275.00	400.00
C-489 - - - - - - - EACH	25.00	27.00	29.00	30.00	36.00	42.00	48.00	58.00	70.00	90.00	120.00	160.00	200.00	300.00	435.00



C-492. FOR GENERAL USE.



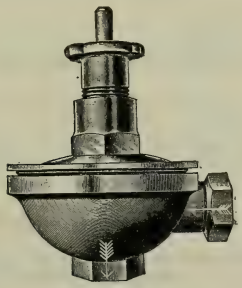
C-493. FOR RAILWAY AND MARINE USE.

HENNEBOEHLE'S AUTOMATIC PRESSURE REGULATORS.

SIZE - - - - - - - - INCHES	1	1¼	1½	2	2½	3	4	5	6	8	10	12	16
ALL BRASS - - - - - - EACH	24.00	30.00	37.00	46.00	60.00	----	----	----	----	----	----	----	----
IRON BODY, BRASS TRIMMINGS EACH	----	----	----	----	----	75.00	105.00	140.00	185.00	285.00	410.00	510.00	700.00

CLOW WATER PRESSURE REGULATORS.

MADE OF BRONZE METAL AND RUBBER.



C-498.

THE MOST SIMPLE AND THE MOST DURABLE

CLOW WATER PRESSURE REGULATORS.—C-498.

Where the water pressure is high, or when it is frequently raised to a high pressure for fire purposes, this Regulator should be used. It has no equal for nicety of adjustment and regulation. It gives a steady pressure, whatever the water works pressure may be. The working parts are moved without contact, wear or friction. It saves the Plumbing.

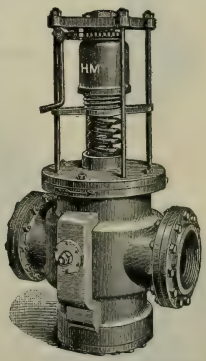
SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
SCREWED . . . . . EACH	10.00	10.00	12.00	17.00	24.00	40.00	50.00



C-500. SIZES, ½ TO 2½-INCH.



C-501. SIZES, 3 AND 4-INCH.



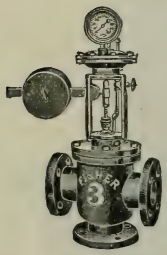
C-502. SIZES, 6 TO 20-INCH.

MUELLER WATER PRESSURE REGULATORS.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	4	6	8	10	12
SCREWED ENDS . . . . . EACH	10.00	10.00	13.00	17.50	24.00	40.00	55.00	70.00	90.00	150.00	225.00	300.00	400.00

Sizes ½, ¾, and 1-inch can be furnished for lead pipe connection. Add to list 50 cents.

Flanged connections furnished for either wrought or cast-iron water mains. Any special flanged connections furnished at a slight additional cost.



C-505. FISHER REDUCING VALVE.

FISHER REDUCING VALVES.—C-505

SIZE . . . . . INCHES	1	1¼	1½	2	2½	3
SCREWED ENDS . . . EACH	30.00	35.00	42.50	50.00	58.00	70.00

SIZE. . . . INCHES	1½	2	2½	3	3½	4	5	6	8
FLANGED ENDS . EACH	45.00	50.00	60.00	75.00	87.50	100.00	125.00	150.00	225.00

FISHER STEAM PUMP GOVERNORS —C-507.

FOR WATER WORKS, HYDRAULIC ELEVATORS, BOILER FEED PUMPS AND ALL PUMPS WORKING UNDER PRESSURE.



C-507.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
SCREWED ENDS . . . . EACH	25.00	27.50	30.00	35.00	42.50	50.00	58.00
FLANGED ENDS . . . . EACH	-----	-----	-----	-----	45.00	50 00	60.00

SIZE . . . . . INCHES	3	3½	4	5	6	8	---
SCREWED ENDS . . . . EACH	70.00	-----	-----	-----	-----	-----	-----
FLANGED ENDS . . . . EACH	75.00	87.50	100.00	125.00	150.00	225.00	-----

With Flanged Valves we furnish Companion Flanges, Bolts and Gaskets complete.

When ordering Governors, give us the size of your steam pipe and also the maximum and minimum steam and water pressure, at ordinary and special duty.

CLAIMS: Simple in construction; strong and durable; cannot get out of order; works automatically; requires no attention; saves valuable machinery; saves labor; saves coal; guaranteed to change speed of engine on a variation of two pounds pressure in the main; is very sensitive, yet positive in its action; positively prevents over-pressure; avoids shock or jar or water ram; saves bursting mains or hose; relieves the engineer of the constant care of the throttle; an ornament to the engine room; invaluable for safety and economy; has no equal.



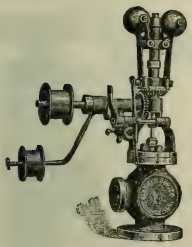
C-510. ANGLE PATTERN.

"NEVER STICK" BLOW-OFF VALVES.—C-510.

Standard Weight for working pressure of 100 lbs. Extra Heavy for working pressure of 250 lbs.

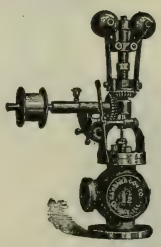
SIZE . . . . . INCHES	1¼	1½	2	2½	3
CENTER TO FACE, SCREWED ENDS, STANDARD . . . . INCHES	-----	-----	3¾	4 5/16	-----
CENTER TO FACE, SCREWED ENDS, EXTRA HEAVY . . . INCHES	2½	2¾	3½	4½	-----
CENTER TO FACE, FLANGED ENDS, STANDARD . . . . INCHES	-----	-----	4	4½	----
CENTER TO FACE, FLANGED ENDS, EXTRA HEAVY . . . INCHES	3½	3½	4⅜	4½	6
DIAMETER OF FLANGES, STANDARD . . . . . INCHES	4½	5	6	7	7½
DIAMETER OF FLANGES, EXTRA HEAVY . . . . . INCHES	5	6	6½	7½	9
PRICE, SCREWED OR FLANGED, STANDARD . . . . . EACH	13.00	15.00	26.00	30.00	52.00
PRICE, SCREWED OR FLANGED, EXTRA HEAVY . . . . EACH	14.00	16 00	28.00	32.00	54.00

Made also in straight patterns for other purposes. The head of the plug has a firm bearing against the locking ring. The plug is adjustable and need not leak. The pressure on the plug does not destroy the packing. The port is inside of the plug and cannot be injured by cutting with scale. The working parts are protected from severe wear.



C-512. SPRING GOVERNOR, WITH SPEEDER, HAND LEVER AND AUTOMATIC STOP.

GARDNER GOVERNORS.



C-514. SPRING GOVERNOR, WITH SPEEDER AND HAND LEVER.

SIZE OF GOVERNOR, DIAM. OF OPENING _ INCHES	1	1¼	1½	2	2¼	2½	3	3½	4	4½	5	6	7
C-512. PLAIN . . . . . EACH	21.00	24.50	29.50	36.00	42.00	48.00	59.00	71.00	83.00	96.00	109.00	140.00	170.00
C-512. FINISHED . . . . . EACH	23.00	27.50	33.50	40.00	47.00	53.00	67.00	80.00	93.00	107.00	121.00	154.00	186.00
C-514. PLAIN . . . . . EACH	18.00	21.00	25.00	30.00	35.00	40.00	50.00	60.00	71.00	83.00	94.00	122.00	150.00
C-514. FINISHED . . . . . EACH	20.00	24.00	29.00	34.00	40.00	45.00	58.00	69.00	81.00	94.00	106.00	136.00	166.00
DIAM. OF BASE FLANGE . . . . . INCHES	--	--	5½	7	7	8	9	9	10	10	12	14	15
DIAM. OF SIDE FLANGE . . . . . INCHES	--•	--	--	--	7	7	8	9	10	10	11	12	14
DIAM. OF PULLEY . . . . . INCHES	1½	2	2½	2½	2½	3½	3½	3½	4½	4½	4½	6	6
WIDTH OF BELT . . . . . INCHES	1	1¼	1½	1½	1½	2	2	2	2½	2½	2½	3	3

In ordering, be particular to state whether plain or finished are wanted, and style of valve chamber desired. For further details of dimensions, see special catalogue.

GARDNER GOVERNOR VALVE CHAMBERS.



C-515.



C-516.



C-517.



C-518.

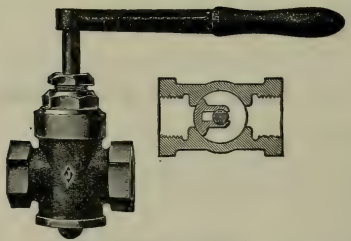


C-519.

The cuts above, C-515, C-516, C-517, C-518 and C-519, show the different styles of valve chambers used on Gardner Governors. We furnish Governors with any of the above chambers and in addition can make flanges square, triangular, or oblong, and of such diameters as are suited for the engines. Unless especially ordered, though, we always send Governors with valve chambers as per our tables of dimensions. When sending templets for drilling of flanges on chambers C-515 and C-516, be sure and mark on templet of base flange the relative position of the steam inlet.



C-520. THROTTLE VALVE.



C-522. THROTTLE VALVE.



C-525. BLOW-OFF VALVE.

IRON-BODY THROTTLE VALVES.—C-520 AND C-522

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	8
C-520. FOR MEDIUM PRESSURE . . . . . EACH	7.00	12.00	15.00	18.00	21.00	25.00	30.00	35.00	65.00
C-520. FOR HIGH PRESSURE . . . . . EACH	13.00	16.00	20.00	25.00	30.00	-----	35.00	40.00	-----
C-522. FOR MEDIUM PRESSURE, SCREWED . EACH	22.50	30.00	40.00	50.00	60.00	-----	-----	-----	-----
C-522. FOR MEDIUM PRESSURE, FLANGED . . EACH	24.00	32.00	42.50	53.00	64.00	----	-----	-----	-----

C-520. These Valves never re-seat twice in succession in the same place; every time the lever is moved the discs revolve. This insures their being perfectly tight and adds to the life of the valve.

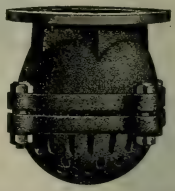
IRON-BODY BLOW-OFF VALVES.—C-525.

SIZE . . . . . INCHES	2	2½	3
SCREWED . . . . . EACH	15.00	20.00	30.00
FLANGED . . . . . EACH	15.00	20.00	30.00

Suitable for steam pressure up to 250 pounds.
Well-known engineers, of the highest standing, regard this valve as being superior to any blow-off valve ever devised.
It can be quickly taken apart and easily repaired at a very trifling expense.
It can be opened and closed as often as required, without danger of choking or clogging.



C-530. FOOT VALVE, SCREWED ENDS.



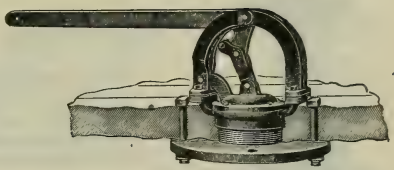
C-531. FOOT VALVE, FLANGED.

IRON FOOT VALVES AND STRAINERS.—C-530 and C-531.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED . . . . EACH	1.15	1.30	1.40	1.90	2.40	3.30	3.90	5.60	7.30	10.50	11.25	14.75	35.00	41.00	64.00	100.00
FLANGED . . . . EACH	----	----	----	----	3.50	4.50	5.75	7.50	9.50	13.00	14.00	17.50	38.00	45.00	70.00	112.00



C-536. FLOAT VALVE



C-538. FLUSH VALVE.

ENTERPRISE FLOAT VALVE.—C-536.

FOR CITY AND RAILROAD WATER SERVICE.

SIZE . . . . . INCHES	4	5	6	7	8	12
SCREWED . . . . . EACH	22.00	32.00	45.00	60.00	75.00	150.00
FLANGED . . . . . EACH	25.00	36.00	50.00	65.00	80.00	------

These Valves are especially adapted for Railroad Tanks and City Water Works Stand Pipes, or Tanks, particularly when the water is pumped from a distance, as the tank is then liable to be flooded by not shutting down the pump as soon as the tank is full. This can be prevented by the use of the Enterprise Valve. It is placed on the inlet pipe in the tank, the float adjusted to proper height, and when the water reaches a given level it will close automatically, either stopping the pump through equalizing the pressure, or opening a relief valve at the pump, thereby notifying the engineer that the tank is full. This is the only float valve that will open with the flow and close against steam pump pressure.

ENTERPRISE FLUSH VALVE.—C-538.

SIZE, 3-INCH . . . . . EACH	17.00

This flush valve is similar in construction to the Float Valve above. The operating lever is pivoted in the arch and so arranged that the greatest leverage is obtained at the moment of opening, when the pressure on the valve is greatest. The link connection lifts the valve rapidly until wide open. The body of the valve is cut away, except where the arch ends attach, and being thus on a level with, or below, the tank bottom permits free flushing of the tank. Railroad water tanks adjacent to the track can be easily fitted with this valve for drenching cars of live stock in hot weather, as the body of the valve is threaded for wrought iron pipe connection. The valve, being located in the bottom of the tank and the discharge pipe when not in use being empty, is not affected by freezing.



C-542. FLOAT.

FLOATS.—C-542.

SIZE . . . . . INCHES	3x11	4x16	4x24	4x36	4x48
JAPANNED TIN . . . . . EACH	.90	----	----	----	----
GALVANIZED IRON . . . . . EACH	1.10	2.40	5.00	8.00	14.00



C-545. FLOAT VALVE.

TANK FLOAT VALVES.—C-545.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
EACH	1.25	1.40	1.50	3.00	5.00	7.50	10.00



D-1. BRASS, 2-INCH AND SMALLER.

EDDY BRASS GATE VALVES.

VALVES D-1 TO D-8 ARE TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 150 POUNDS AND FOR A WORKING STEAM PRESSURE OF 100 POUNDS.

These Valves have stationary stems and open by turning to the left. Rising Stem Valves can be furnished to order.



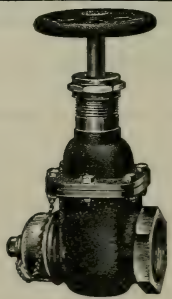
D-2. BRASS, 2½-INCH AND LARGER.

EDDY BRASS GATE VALVES.—D-1 and D-2.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8
SCREWED ENDS . . . . EACH	1.30	1.30	1.70	2.20	3.20	4.20	6.20	11.50	16.00	22.00	35.00	42.50	50.00	80.00	105.00	130.00
FLANGED ENDS . . . . EACH	----	----	----	----	5.60	6.50	9.00	15.00	20.00	28.00	42.00	51.00	60.00	90.00	110.00	130.00



D-5. QUICK-OPENING VALVE.



D-7. HOSE VALVE, WITH CAP AND CHAIN.



D-8. WITHOUT CAP AND CHAIN.

EDDY BRASS QUICK-OPENING GATE VALVES.—D-5.

SIZE . . . . . INCHES	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8
SCREWED . . . . . EACH	2.30	2.30	2.70	3.20	4.20	5.20	7.50	12.80	17.30	23.60	37.00	45.50	54.00	85.00	110.00	137.00
FLANGED . . . . . EACH	----	----	----	----	6.60	8.50	10.30	16.30	21.30	29.60	44.00	54.00	64.00	95.00	115.00	137.00

*EDDY BRASS HOSE GATE VALVES.—D-7 and D-8.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
WITH BRASS CAP AND CHAIN . . . . . EACH	2.70	3.30	4.40	5.50	7.60	13.00	17.60
WITH IRON CAP AND CHAIN . . . . . EACH	2.10	2.70	3.80	4.90	7.00	12.40	17.00
WITHOUT CAP AND CHAIN . . . . . EACH	1.70	2.20	3.20	4.20	6.20	11.50	16.00

These Valves have one male end to fit hose coupling, and one female end to fit wrought-iron pipe. Always send hose coupling for male end. Specify whether iron or brass cap is wanted. *If not specified*, we send *without cap*.

Eddy Valves are all double-faced, and constructed with two loose Gates, each perfectly independent of the other.

*For Single Gate Hose Valves, see page 113.



D-9. 2-INCH AND SMALLER.

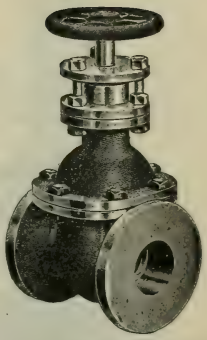
EDDY BRASS GATE VALVES.

HIGH PRESSURE.

TESTED TO A WATER PRESSURE OF 600 POUNDS PER SQUARE INCH.

SUITABLE FOR A WORKING WATER PRESSURE OF 300 POUNDS AND A WORKING STEAM PRESSURE OF 250 POUNDS.

STATIONARY STEM.



D-10. 2½-INCH AND LARGER, FLANGED.

EDDY HIGH PRESSURE BRASS GATE VALVES.—D-9 and D-10.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
SCREWED ENDS . . . EACH	3.50	4.50	5.50	8.00	10.00	15.00	22.00	32.00	44.00	58.00	65.00	72.00	115.00
FLANGED ENDS . . . EACH	5.50	7.00	9.00	11.00	14.00	18.50	27.00	40.00	52.00	68.00	78.00	86.00	135.00



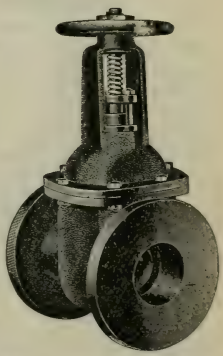
D-11. 2-INCH AND SMALLER.

The stem and nut being exposed gives free access for oiling and taking care of them.

The stem, rising to the same height that the gates are lifted, makes a positive indicator that shows the position of the gates at all times.

The hand wheel, which is of iron, is fastened to the nut in the yoke and does not rise with the stem.

*OUTSIDE STEM AND YOKE.



D-15. 2½-INCH AND LARGER, FLANGED.

EDDY HIGH PRESSURE BRASS GATE VALVES.—D-11 and D-15.

SIZE . . . . . INCHES	1¼	1½	2	2½	3	3½	4	4½	5	6
SCREWED ENDS . . . . . EACH	12.00	15.00	22.00	31.00	41 50	55.00	72.00	80.00	88.00	140.00
FLANGED ENDS . . . . . EACH	15.00	20.00	27.00	36.00	50.00	63.00	82.00	92.00	102.00	160.00

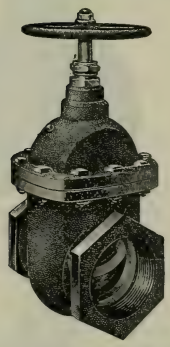
*For Dimensions of Outside Stem and Yoke Valves, see special Valve Catalogue.

For high pressures and endurance these Valves have no equal. The metal used is equal to that specified for Government Marine work; its tensile and traverse strength is superior to that used in any other make of valve.

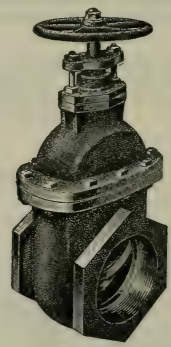
EDDY IRON BODY GATE VALVES.

TAPER SEAT. DOUBLE GATE.

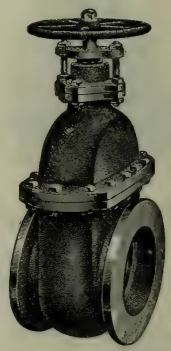
TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 125 POUNDS AND A WORKING STEAM PRESSURE OF 80 POUNDS. VALVES OPEN BY TURNING TO THE LEFT.



D-16. 6-INCH AND SMALLER.



D-17. 7-INCH AND LARGER.



D-19. FLANGED END.

EDDY IRON-BODY, BRONZE MOUNTED GATE VALVES.—D-16, D-17 and D-19.

SIZE OF VALVE ..... INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED OR FLANGED ENDS ... EACH	7.00	10.50	13.00	16.50	18.00	22.00	25.00	31.00	37.00	45.00	60.00	80.00
BY-PASS, EXTRA ..... EACH	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	25.00
SPUR GEARING, EXTRA ..... EACH	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	15.00
BEVEL GEARING, EXTRA ..... EACH	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	17.50
INDICATOR, EXTRA ..... EACH	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	20.00
END TO END, SCREWED ENDS ... INCHES	5½	6	7½	7½	8	8½	9	10½	11	11	13¼	14¾
FACE TO FACE, FLANGED, NO BY-PASS INCHES	5¾	6½	7¾	7¾	7¾	8½	9¼	9¾	11	11	12	13½
FACE TO FACE, FLANGED, BY-PASS INCHES	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	18
DIAMETER OF END FLANGES ... INCHES	6	7	7½	8½	9	9¼	10	11	12½	13½	16	19
SIZE OF BY-PASS ..... INCHES	----	-----	-----	-----	-----	-----	-----	-----	-----	----	----	2

SIZE OF VALVE ..... INCHES	14	15	16	18	20	22	24	30	36	40	42	48
FLANGED ENDS ..... EACH	120.00	135.00	150.00	190.00	240.00	325.00	400.00	700.00	1,200.00	-----	-----	-----
BY-PASS, EXTRA ..... EACH	25.00	25.00	42.00	42.00	42.00	42.00	65.00	65.00	100.00	100.00	100.00	125.00
SPUR GEARING, EXTRA ..... EACH	15.00	15.00	17.50	17.50	17.50	17.50	-----	-----	-----	-----	-----	-----
BEVEL GEARING, EXTRA ..... EACH	17.50	17.50	20.00	20.00	20.00	20.00	-----	-----	-----	-----	-----	-----
INDICATOR, EXTRA ..... EACH	20.00	20.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
FACE TO FACE, FLANGED, NO BY-PASS INCHES	15	15	16¼	16¼	17¾	19	20	22½	26½	29	29	41
FACE TO FACE, FLANGED, BY-PASS INCHES	19	19	20	20	21	21	22½	22½	29	30	32	41
DIAMETER OF END FLANGES ... INCHES	21	22½	23½	25	27½	29½	31½	38	44½	47¾	51	57½
SIZE OF BY-PASS ..... INCHES	2	2	3	3	3	3	4	4	6	6	6	8

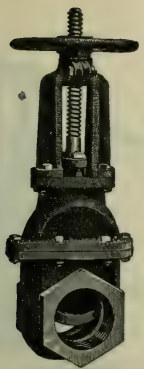
Valves with Flanged Ends are made from 2-inch to 72-inch inclusive. Prices of Valves 24-inch and larger include Spur or Bevel Gearing, as required. Prices of Valves larger than 36-inch will be given on application.

Valves 2, 2½ and 3-inch have solid Bronze Gates.

Unless otherwise ordered, Valves 6-inch and smaller have Bronze Stuffing Boxes. Valves larger than 6-inch have Strapped Stuffing Boxes.

By-pass Valves in 2-inch are of Brass with Screwed Ends and Wrought Iron Pipe Connections and larger sizes are of Iron Body, Bronze Mounted, with Flanged Ends and Cast Iron Flanged Elbows, and have Inside Stems, unless otherwise ordered.

The Indicator listed is of the Worm and Worm Wheel style.



D-20. SCREWED ENDS.

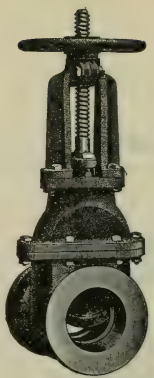
EDDY IRON BODY VALVES.

TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH.

This Valve, serving as an indicator, is specified by Fire Insurance and Sprinkler Companies, and is desirable for many purposes where there is sufficient room for its operation.

The stem, rising to the same height that the gates are lifted, makes a positive indicator that shows the position of the gates at all times.

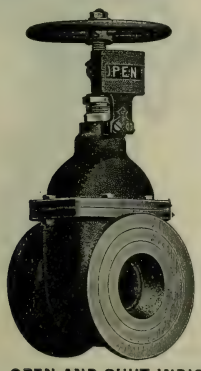
The hand wheel is fastened to the nut in the yoke and does not rise with the stem.



D-21. FLANGED ENDS.

OUTSIDE STEM AND YOKE VALVES, IRON BODY, BRONZE MOUNTED.—D-20 and D-21.

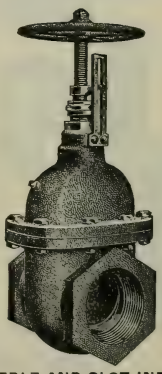
SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10
SCREWED OR FLANGED . . . . . EACH	9.00	13.00	15.50	19.00	21.25	26.00	30.00	36.00	44.00	53.00	70.00
SIZE . . . . . INCHES	12	14	15	16	18	20	22	24	30	36	-----
SCREWED OR FLANGED . . . . . EACH	96.00	140.00	155.00	175.00	220.00	280.00	380.00	465.00	800.00	1,350.00	-----
BY-PASS EXTRA . . . . . EACH	25.00	25.00	25.00	42.00	42.00	42.00	42.00	65.00	65.00	100.00	-----



D-22. OPEN AND SHUT INDICATOR.

These Indicators are very desirable to use where a rising stem Valve is not employed on account of choice, or insufficient room for its operation.

The Open and Shut Construction is shown by Figure D-22 and the Needle and Slot by Figure D-24. In the former style the two words are so arranged on an indicator plate that they appear at the opening as the Valve is opened or closed.



D-24. NEEDLE AND SLOT INDICATOR.

OPEN AND SHUT INDICATOR VALVES.—D-22.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED OR FLANGED ENDS EACH	9.00	13.00	16.00	19.50	21.50	26.00	30.00	36.00	44.00	52.50	70.00	90.00

NEEDLE AND SLOT INDICATOR VALVES.—D-24.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED OR FLANGED ENDS . EACH	8.50	12.50	15.50	19.00	20.50	25.00	28.00	35.00	41.50	50.50	67.50	88.00

For dimensions of Outside Stem and Yoke Valves and Indicator Valves see Special Valve Catalogue.

EDDY GATE VALVES.

TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 100 POUNDS AND A WORKING STEAM PRESSURE OF 80 POUNDS.



D-25. SCREWED ENDS.

The gates are raised and lowered by the lever and its connections, which method of operating gives a quick motion, and makes the Valve an especially desirable one to use where a quick opening is necessary.

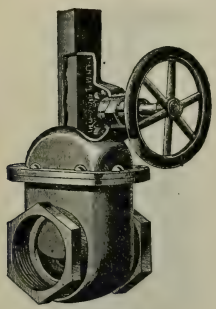
The lever is so attached to the stem that the latter can be locked in any desired position.



D-26. FLANGED ENDS.

SLIDING STEM AND LEVER VALVES, SCREWED OR FLANGED ENDS.—D-25 and D-26.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
IRON BODY, BRONZE MOUNTED . . EACH	8.20	11.80	14.40	18.00	19.70	23.80	27.00	33.30	39.70	48.00	63.50	84.00
ALL IRON . . . . . EACH	7.50	10.75	13.00	16.35	18.00	21.50	24.50	30.25	36.00	43.50	57.50	76.00

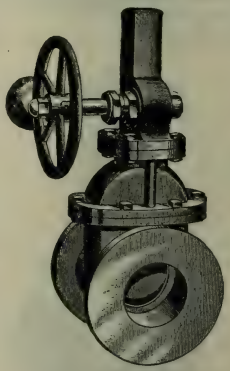


D-27. 3-INCH AND SMALLER.

TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 100 POUNDS.

These Valves are operated by a Rack and Pinion, and are so proportioned that it takes less than one revolution of the wheel to open or close the Gates. They are also made to operate with a lever, instead of wheel, at same price.

They are for use under a medium pressure not to exceed 100 pounds, and where a quick closing of the Valve is permissible.



D-30. 4-INCH AND LARGER.

RACK AND PINION QUICK-OPENING VALVES.—D-27 and D-30.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8
ALL BRASS, SCREWED . . . . . EACH	2.60	3.00	3.50	4.50	5.50	7.80	13.60	20.50	27.00	42.00	50.00	60.00	92.00	120.00	150.00
ALL BRASS, FLANGED . . . . . EACH	----	----	----	7.00	8.00	10.75	17.00	24.50	33.00	48.00	58.00	70.00	102.00	130.00	160.00
IRON BODY, SCREWED OR FLANGED EACH	----	----	----	----	----	9.00	14.00	17.00	21.00	25.00	28.00	31.00	37.00	46.00	55.00
HUB ENDS . . . . . EACH	----	----	----	----	----	9.00	----	17.00	----	25.00	----	31.00	37.00	----	55.00

SIZE . . . . . INCHES	10	12	14	15	16	18	20	22	24
IRON BODY, SCREWED OR FLANGED . . . . . EACH	80.00	115.00	150.00	175.00	200.00	250.00	320.00	420.00	520.00
HUB ENDS . . . . . EACH	80.00	115.00	150.00	175.00	200.00	250.00	320.00	420.00	520.00

For dimensions of these Valves, see special Valve Catalogue.

EDDY ANGLE GATE VALVES.

IRON BODY, BRONZE MOUNTED. **TAPER SEAT, DOUBLE GATE.**

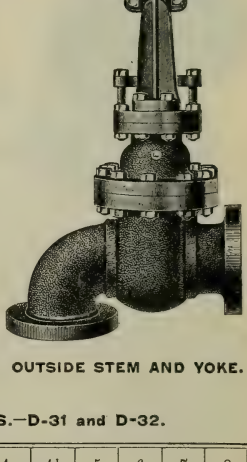
SCREWED OR FLANGED.



D-31. INSIDE STEM.

TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 125 POUNDS AND FOR A WORKING STEAM PRESSURE OF 80 POUNDS.

Valves having an angle end save one joint in the pipe line and occupy less room than an elbow and straight valve.

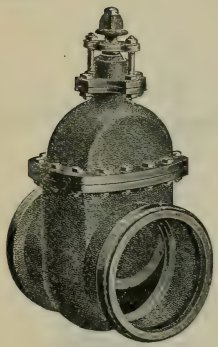


D-32. OUTSIDE STEM AND YOKE.

EDDY IRON BODY BRONZE MOUNTED ANGLE GATE VALVES.—D-31 and D-32.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
D-31. SCREWED OR FLANGED . . . . . EACH	8.50	12.00	15.00	19.00	20.50	25.00	28.50	35.50	43.00	52.00
D-32. SCREWED OR FLANGED . . . . . EACH	10.50	14.50	17.50	21.50	24.00	29.00	33.00	40.50	50.00	60.00
CENTER TO FACE OF ANGLE END, SCREWED ENDS . . . . . INCHES	3 1/8	3 3/8	3 7/8	4 1/16	4 3/8	5 1/8	5 5/8	6	6 3/4	7 1/4
CENTER OF ANGLE END TO FACE OF STRAIGHT END, SCREWED ENDS. INCHES	7 9/16	8 3/8	9 1/16	10 9/16	11 3/16	11 7/8	12 3/8	14 1/2	15 3/8	15 11/16
CENTER TO FACE OF ANGLE END, FLANGED . . . . . INCHES	3 1/2	3 13/16	4 1/2	4 3/8	5 1/2	5 9/16	5 9/16	6 1/4	6 3/4	9
CENTER OF ANGLE END TO FACE OF STRAIGHT END, FLANGED . INCHES	7 11/16	8 1/8	10 1/16	10 11/16	11	11 7/8	12 3/4	13 1/2	15 3/8	15 1/2
CENTER OF ANGLE END TO CENTER OF VALVE . . . . . INCHES	4 1/16	5 3/8	6 3/16	6 13/16	7 1/2	7 5/8	8 1/4	9	9 1/8	10
DIAMETER OF END FLANGES . . . . . INCHES	6	7	7 1/2	8 1/4	9	9 1/2	10	11	12 1/4	13 1/2
CENTER OF STRAIGHT END TO TOP OF WHEEL NUT, INSIDE STEM . INCHES	9 3/8	10 3/8	12 3/8	13 1/4	13 3/4	15 1/2	17 1/4	20 3/8	22 1/4	24 1/2
CENTER OF STRAIGHT END TO TOP OF WHEEL NUT, O. S. & Y. . . INCHES	13 1/2	15 3/4	17 1/2	19	20 1/2	22 1/2	25	28	30 1/2	33
CENTER OF STRAIGHT END TO TOP OF STEM, OPEN, O. S. & Y. . . INCHES	16 1/2	19 1/2	22 1/4	23 1/2	25 1/2	28	31 1/2	35 1/2	39 1/4	43

SIZE OF VALVE . . . . . INCHES	10	12	14	15	16	18	20	22	24	...
D-31. SCREWED OR FLANGED . . . . . EACH	70.00	92.00	140.00	155.00	172.00	....	....	....	....	....
D-32. SCREWED OR FLANGED . . . . . EACH	80.00	108.00	160.00	175.00	200.00	....	....	....	....	....
CENTER TO FACE OF ANGLE END, SCREWED ENDS . . . . . INCHES	8 1/2	9 3/4	....	....	....	....	....	....	....	....
CENTER OF ANGLE END TO FACE OF STRAIGHT END, SCREWED ENDS INCHES	18 1/16	21 1/2	....	....	....	....	....	....	....	....
CENTER TO FACE OF ANGLE END, FLANGED . . . . . INCHES	10 1/2	10 1/2	11 1/2	11 13/16	12 5/16	13 1/16	15 1/16	16 5/16	17 1/2	....
CENTER OF ANGLE END TO FACE OF STRAIGHT END, FLANGED . INCHES	18	20 7/8	23 7/16	23 7/8	25 1/16	26 1/4	29 1/4	31 3/4	33 1/4	....
CENTER OF ANGLE END TO CENTER OF VALVE . . . . . INCHES	12	14 1/2	15 1/16	16 1/8	17 5/16	18 1/2	20 3/4	22 1/4	23 3/4	....
DIAMETER OF END FLANGES . . . . . INCHES	16	19	21	22 1/4	23 1/2	25	27 1/4	29 1/2	31 1/2	....
CENTER OF STRAIGHT END TO TOP OF WHEEL NUT, INSIDE STEM . INCHES	29 1/4	33 1/8	36 1/4	38 13/16	41 5/8	43 1/4	48 1/2	54	59 1/4	....
CENTER OF STRAIGHT END TO TOP OF WHEEL NUT, O. S. & Y. . . INCHES	38 1/4	43 1/4	51 7/16	54	55 5/8	61 1/2	67 3/4	74	78	....
CENTER OF STRAIGHT END TO TOP OF STEM, OPEN, O. S. & Y. . . INCHES	49 1/2	57	67 1/4	70	73 3/8	81 1/2	89 1/2	98	104 1/4	....



D-35. HUB ENDS

EDDY IRON BODY GATE VALVES.

TESTED TO A WATER PRESSURE OF 300 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 125 POUNDS.

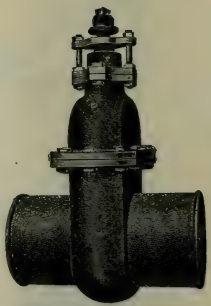


Open by turning to the Left.



Open by turning to the Right.

All Water Gates will be shipped made to open to the Left unless open to Right is specially ordered.

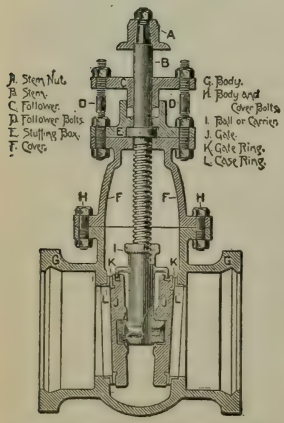


D-38. SPIGOT ENDS.

EDDY IRON BODY, BRONZE MOUNTED GATE VALVES.—D-35 and D-38.

SIZE OF VALVE . . . INCHES	2	3	4	5	6	8	10	12	14
HUB ENDS . . . EACH	10.00	15.00	18.00	25.00	31.00	45.00	50.00	80.00	120.00
SPIGOT ENDS . . . EACH	11.00	17.00	20.00	27.50	34.00	50.00	66.00	88.00	132.00
BY-PASS, EXTRA . . . EACH	-----	-----	-----	-----	-----	-----	-----	25.00	25.00
SPUR GEARING, EXTRA . . . EACH	-----	-----	-----	-----	-----	-----	-----	15.00	15.00
BEVEL GEARING, EXTRA . . . EACH	-----	-----	-----	-----	-----	-----	-----	17.50	17.50
INDICATOR, EXTRA . . . EACH	-----	-----	-----	-----	-----	-----	-----	20.00	20.00

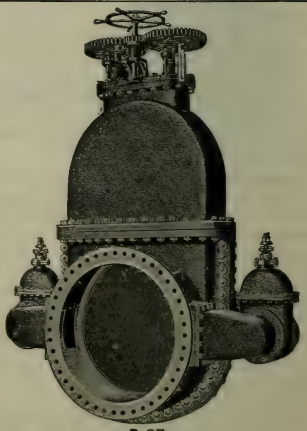
SIZE OF VALVE . . . INCHES	15	16	18	20	22	24	30	36	------
HUB ENDS . . . EACH	135.00	150.00	190.00	240.00	320.00	400.00	700.00	1,200.00	------
SPIGOT ENDS . . . EACH	148.00	165.00	210.00	260.00	350.00	440.00	770.00	1,300.00	------
BY-PASS, EXTRA . . . EACH	25.00	42.00	42.00	42.00	42.00	65.00	65.00	100.00	------
SPUR GEARING, EXTRA . . . EACH	15.00	17.50	17.50	17.50	17.50	------	------	------	------
BEVEL GEARING, EXTRA . . . EACH	17.50	20.00	20.00	20.00	20.00	------	------	------	------
INDICATOR, EXTRA . . . EACH	20.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	------



SECTIONAL EDDY GATE VALVE.

The list prices against sizes of Valves 24 inch and larger include the furnishing of spur, bevel or angle bevel gearing as required.

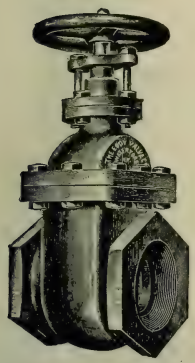
In ordering parts for Eddy Valves please specify size and style of valve; whether opened by stem turning to the right or left; also designate part by letter as shown on sectional cut.



D-37.
48-INCH VALVE GEARED TO STAND UPRIGHT, WITH DOUBLE BY-PASS VALVES.

EDDY EXTRA HEAVY GATE VALVES.

IRON BODY, BRONZE MOUNTED. PARALLEL SEAT, DOUBLE GATE.
PLAIN OR RIBBED BODIES.
INSIDE STEM.

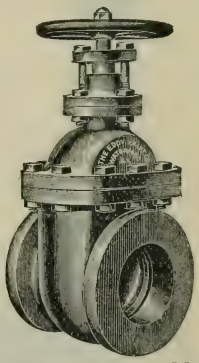


D-39. SCREWED ENDS.

TESTED TO A WATER PRESSURE OF 400 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING STEAM PRESSURE OF 125 POUNDS OR, IF WITH RIBBED BODIES AND COVERS, OF 150 POUNDS.

The Stems are of Solid Bronze. The Valves are so made that the Stuffing Box can be repacked under pressure. The Case Rings are double joint and heavy to permit their being unscrewed from the Body and replaced after they have been ground to the Gate Rings.

The Body and Cover Flanges are grooved to hold packing. Rubber Packing is used for Gaskets unless a different construction is preferred.



D-40. FLANGED ENDS.

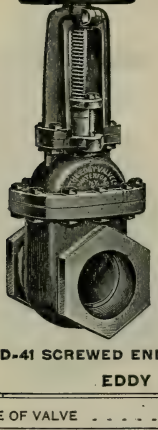
EDDY EXTRA HEAVY IRON BODY GATE VALVES.—D-39 and D-40.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
SCREWED OR FLANGED ENDS . . . . . EACH	12.75	19.00	23.50	30.00	32.50	39.00	45.00	50.00	58.50	71.50
TONGUED AND GROOVED FLANGES, EXTRA. EACH	.75	.75	1.00	1.30	1.30	1.30	1.75	2.00	2.00	2.25
IF RIBBED, EXTRA . . . . . EACH	1.30	1.65	2.50	3.25	3.50	4.00	4.00	5.00	5.75	6.25
BY-PASS WITH INSIDE STEM, EXTRA . . . EACH	------	------	------	------	------	------	------	16.25	16.25	18.75
BY-PASS WITH O. S. & Y., EXTRA. . . . . EACH	------	------	------	------	------	------	------	20.00	20.00	23.00
SPUR GEARING, EXTRA . . . . . EACH	------	------	------	------	------	------	------	15.00	15.00	15.00
BEVEL GEARING, EXTRA . . . . . EACH	------	------	------	------	------	------	------	17.50	17.50	17.50
INDICATOR, EXTRA . . . . . EACH	1.80	2.50	3.00	3.00	3.25	3.25	3.25	3.50	3.50	4.00
DRILLING END FLANGES, EXTRA . . . . . EACH	.85	.85	1.25	1.25	1.50	1.50	1.50	1.75	2.50	2.50
END TO END, SCREWED ENDS . . . . . INCHES	5¾	6	7½	8	8½	9	9½	11¼	12	12
FACE TO FACE, FLANGED, NO BY-PASS . INCHES	6½	6¾	7½	9	11	11½	12½	13	13¾	14¼
FACE TO FACE, FLANGED, WITH BY-PASS INCHES	------	------	------	------	------	------	------	15⅝	17¼	18⅜
DIAMETER OF END FLANGES . . . . . INCHES	6	7	7½	8½	9	9¼	10	11	12½	13½
SIZE OF BY-PASS . . . . . INCHES	------	------	------	------	------	------	------	1½	1½	1½

SIZE OF VALVE . . . . . INCHES	9	10	12	14	15	16	18	20	22	24
SCREWED OR FLANGED ENDS . . . . . EACH	82.00	92.00	122.00	160.00	190.00	220.00	260.00	300.00	------	------
TONGUED AND GROOVED FLANGES, EXTRA. EACH	2.25	3.00	3.25	3.25	4.00	4.50	5.00	5.50	6.00	7.00
IF RIBBED, EXTRA . . . . . EACH	7.75	9.00	10.50	12.00	13.00	14.00	16.00	20.00	24.00	30.00
BY-PASS WITH INSIDE STEM, EXTRA . . . EACH	18.75	18.75	25.00	25.00	25.00	25.00	25.00	42.00	42.00	42.00
BY-PASS WITH O. S. & Y., EXTRA . . . . EACH	23.00	23.00	30.00	30.00	30.00	30.00	30.00	48.00	48.00	48.00
SPUR GEARING, EXTRA . . . . . EACH	15.00	15.00	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
BEVEL GEARING, EXTRA . . . . . EACH	17.50	17.50	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
INDICATOR, EXTRA . . . . . EACH	4.00	4.50	5.00	5.00	5.00	6.00	8.00	8.00	8.00	8.00
DRILLING END FLANGES, EXTRA . . . . . EACH	2.50	3.00	4.00	4.00	5.20	5.20	6.00	6.00	6.00	6.00
END TO END, SCREWED ENDS . . . . . INCHES	13	14	15	------	------	------	------	------	------	------
FACE TO FACE, FLANGED, NO BY-PASS . INCHES	15½	16¾	17½	19	21	23	25	26½	28	29⅝
FACE TO FACE, FLANGED, WITH BY-PASS INCHES	20⅛	21½	22	22	23	23	25	30	30	32
DIAMETER OF END FLANGES . . . . . INCHES	15	16	19	21	22¼	23½	25	27½	29½	32
SIZE OF BY-PASS . . . . . INCHES	1½	1½	2	2	2	2	2	3	3	3

If Steel Stems are preferred and it is so stated when ordering, they will be furnished without additional cost. By-Pass Valves have Screwed Ends. Up to and including 2 inch they are of Brass; larger sizes are Iron Body, Bronze Mounted, and have Inside Stem or Outside Stem and Yoke, as desired. The Indicator listed is of the Needle and Slot Style.

EDDY EXTRA HEAVY GATE VALVES.



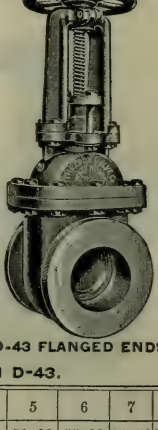
D-41 SCREWED ENDS.

PLAIN OR RIBBED BODIES.
OUTSIDE STEM AND YOKE.

TESTED TO A WATER PRESSURE OF 400 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING STEAM PRESSURE OF 125 POUNDS OR, IF WITH RIBBED BODIES AND COVERS, OF 150 POUNDS.

The Stems are of Solid Bronze. The Valves are so made that the Stuffing Box can be repacked under pressure. The Case Rings are double joint and heavy to permit their being unscrewed from the Body and replaced after they have been ground to the Gate Rings.

The Body and Cover Flanges are grooved to hold packing. Rubber Packing is used for Gaskets unless a different construction is preferred.



D-43 FLANGED ENDS.

EDDY EXTRA HEAVY IRON BODY GATE VALVES.—D-41 and D-43.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
SCREWED OR FLANGED ENDS . . . . . EACH	15.00	22.00	27.00	34.00	37.00	44.00	51.00	55.00	64.50	80.00
TONGUED AND GROOVED FLANGES, EXTRA . . EACH	.75	.75	1.00	1.30	1.30	1.30	1.75	2.00	2.00	2.25
IF RIBBED, EXTRA . . . . . EACH	1.30	1.65	2.50	3.25	3 50	4.00	4.00	5.00	5.75	6.25
BY-PASS WITH INSIDE STEM, EXTRA . . . . . EACH	----	----	----	----	----	----	----	16.25	16.25	18.75
BY-PASS WITH O. S. AND Y., EXTRA . . . . . EACH	----	----	----	----	----	----	----	20.00	20.00	23.00
SPUR GEARING, EXTRA . . . . . EACH	----	----	----	----	----	----	----	15.00	15.00	15.00
BEVEL GEARING, EXTRA . . . . . EACH	----	----	----	----	----	----	----	17.50	17.50	17.50
DRILLING END FLANGES, EXTRA . . . . . EACH	.85	.85	1.25	1.25	1.50	1.50	1.50	1.75	2.50	2.50
END TO END, SCREWED ENDS . . . . . INCHES	5½	6	7½	8	8½	9	9½	11½	12	12
FACE TO FACE, FLANGED, NO BY-PASS . . . INCHES	6¼	6¾	7½	9	11	11½	12⅛	13	13⅜	14½
FACE TO FACE, FLANGED, WITH BY-PASS . . INCHES	----	----	----	----	----	----	----	15⅝	17½	18⅜
DIAMETER OF END FLANGES . . . . . INCHES	6	7	7½	8½	9	9¼	10	11	12½	13½
SIZE OF BY-PASS . . . . . INCHES	----	----	----	----	----	----	----	1¼	1¼	1½
CENT. OF PORT TO TOP OF HAND WHEEL NUT INCHES	13½	14⅜	15⅝	17¼	20	21⅞	23⅝	27½	30	32⅝
CENT. OF PORT TO TOP OF STEM, OPEN . . . INCHES	15⅜	17¼	19	21⅝	24⅝	27	29⅜	35	37¾	41¼

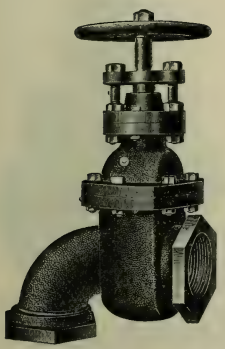
SIZE OF VALVE . . . . . INCHES	9	10	12	14	15	16	18	20	22	24
SCREWED OR FLANGED ENDS . . . . . EACH	92.00	103.50	138.00	180.00	215.00	250.00	295.00	340.00	----	----
TONGUED AND GROOVED FLANGES, EXTRA . . EACH	2.25	3.00	3.25	3.25	4.00	4.50	5.00	5.50	6.00	7.00
IF RIBBED, EXTRA . . . . . EACH	7.75	9.00	10.50	12.00	13.00	14.00	16.00	20.00	24.00	30.00
BY-PASS WITH INSIDE STEM, EXTRA . . . . . EACH	18.75	18.75	25.00	25.00	25.00	25.00	25.00	42.00	42.00	42.00
BY-PASS WITH O. S. AND Y., EXTRA . . . . . EACH	23.00	23.00	30.00	30.00	30.00	30.00	30.00	48.00	48.00	48.00
SPUR GEARING, EXTRA . . . . . EACH	15.00	15.00	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
BEVEL GEARING, EXTRA . . . . . EACH	17.50	17.50	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
DRILLING END FLANGES, EXTRA . . . . . EACH	2.50	3.00	4.00	4.00	5.20	5.20	6.00	6.00	6.00	6.00
END TO END, SCREWED ENDS . . . . . INCHES	13	14	15	----	----	----	----	----	----	----
FACE TO FACE, FLANGED, NO BY-PASS . . . INCHES	15½	16¾	17½	19	21	23	25	26½	28	29½
FACE TO FACE, FLANGED, WITH BY-PASS . . INCHES	20⅜	21¼	22	22	23	23	25	30	30	32
DIAMETER OF END FLANGES . . . . . INCHES	15	16	19	21	22¼	23½	25	27½	29½	32
SIZE OF BY-PASS . . . . . INCHES	1½	1½	2	2	2	2	2	3	3	3
CENT. OF PORT TO TOP OF HAND WHEEL NUT INCHES	36½	39½	43½	51⅝	53⅝	55½	61⅞	68½	73⅜	78½
CENT. OF PORT TO TOP OF STEM, OPEN . . . INCHES	45¾	50⅜	56¼	67⅛	70⅛	72⅜	81½	89½	96⅜	104

If Steel Stems are preferred, and it is so stated when ordering, they will be furnished without additional cost. The Stem and Nut being exposed gives free access for oiling, etc. The Stem, rising to the same height that the gates are lifted, is a positive Indicator, showing the position of the Gates at all times. The Hand Wheel is fastened to the Nut in the Yoke and does not rise with the Stem. By-Pass Valves have Screwed Ends. Up to and including 2 inch they are of brass; larger sizes are of iron body, bronze mounted, and have Inside Stem or Outside Stem and Yoke as desired.

EDDY EXTRA HEAVY ANGLE GATE VALVES.

IRON BODY, BRONZE MOUNTED. PARALLEL SEAT, DOUBLE GATE.

PLAIN OR RIBBED BODIES.



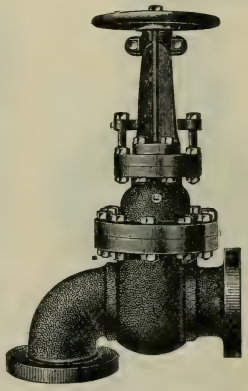
D-46. INSIDE STEM.

TESTED TO A WATER PRESSURE OF 400 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING STEAM PRESSURE OF 125 POUNDS OR, IF WITH RIBBED BODIES AND COVERS, OF 150 POUNDS.

The Stems are of Solid Bronze. The Valves are so made that the Stuffing Box can be repacked under pressure. The Case Rings are double joint and heavy to permit their being unscrewed from the Body and replaced after they have been ground to the Gate Rings.

The Body and Cover Flanges are grooved to hold packing. Rubber Packing is used for Gaskets unless a different construction is preferred.

Valves having an Angle end save one joint in the pipe line and occupy less room than an elbow and straight Valve.



D-47. OUTSIDE STEM AND YOKE.

EDDY EXTRA HEAVY ANGLE GATE VALVES.—D-46 and D-47.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
D-46. SCREWED OR FLANGED ENDS . . . . . EACH	14.50	21.00	26.00	33.00	35.00	42.00	50.00	55.00	65.00	80.00
D-47. SCREWED OR FLANGED ENDS . . . . . EACH	16.50	24.00	29.00	36.50	40.00	48.00	55.00	60.00	70.00	87.00
TONGUED AND GROOVED FLANGES, EXTRA . . . EACH	.75	.75	1.00	1.30	1.30	1.30	1.75	2.00	2.00	2.25
IF RIBBED, EXTRA . . . . . EACH	1.30	1.65	2.50	3.25	3.50	4.00	4.00	5.00	5.75	6.25
BY-PASS WITH INSIDE STEM, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	16.25	16.25	18.75
BY-PASS WITH O. S. AND Y., EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	20.00	20.00	23.00
SPUR GEARING, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	15.00	15.00	15.00
BEVEL GEARING, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	17.50	17.50	17.50
INDICATOR (D-46), EXTRA . . . . . EACH	1.80	2.50	3.00	3.00	3.25	3.25	3.25	3.50	3.50	4.00
DRILLING END FLANGES, EXTRA . . . . . EACH	.85	.85	1.25	1.25	1.50	1.50	1.50	1 75	2.50	2.50

SIZE OF VALVE . . . . . INCHES	9	10	12	14	15	16	18	20	22	24
D-46. SCREWED OR FLANGED ENDS . . . . . EACH	90.00	100.00	135.00	180.00	210.00	245.00	-----	-----	-----	-----
D-47. SCREWED OR FLANGED ENDS . . . . . EACH	100.00	112.50	150.00	200.00	235.00	275.00	-----	-----	-----	-----
TONGUED AND GROOVED FLANGES, EXTRA . . . EACH	2.25	3.00	3.25	3.25	4.00	4.50	5.00	5.50	6.00	7.00
IF RIBBED, EXTRA . . . . . EACH	7.75	9.00	10.50	12.00	13.00	14.00	16.00	20.00	24.00	30.00
BY-PASS WITH INSIDE STEM, EXTRA . . . . . EACH	18.75	18.75	25.00	25.00	25.00	25.00	25.00	42.00	42.00	42.00
BY-PASS WITH O. S. AND Y., EXTRA . . . . . EACH	23.00	23.00	30.00	30.00	30.00	30.00	30 00	48.00	48.00	48.00
SPUR GEARING, EXTRA . . . . . EACH	15.00	15.00	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
BEVEL GEARING, EXTRA . . . . . EACH	17.50	17.50	20.00	20.00	20.00	20.00	20.00	20 00	20.00	20.00
INDICATOR (D-46), EXTRA . . . . . EACH	4.00	4.50	5.00	5.00	5.00	6.00	8.00	8.00	8.00	8.00
DRILLING END FLANGES, EXTRA . . . . . EACH	2.50	3.00	4.00	4.00	5.20	5.20	6.00	6.00	6.00	6.00

If steel stems are preferred, and it is so stated when ordering, they will be furnished without additional cost.

By-Pass Valves have Screwed Ends. Up to and including two inch they are of brass; larger sizes are of iron body, bronze mounted, and have Inside Stem or Outside Stem and Yoke as desired.

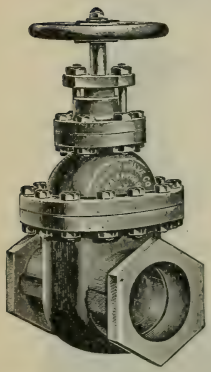
In the Outside Stem and Yoke Valves, the stem and nut being exposed, give free access for oiling, etc. The stem, rising to the same height that the gates are lifted, makes a positive indicator that shows the position of the gates at all times. The hand wheel is fastened to the nut in the yoke and does not rise with the stem.

For dimensions of these Valves see special Valve Catalogue.

EDDY HIGH PRESSURE GATE VALVES.

IRON BODY, BRONZE MOUNTED — PARALLEL SEAT, DOUBLE GATE.

PLAIN OR RIBBED BODIES.
INSIDE STEM.

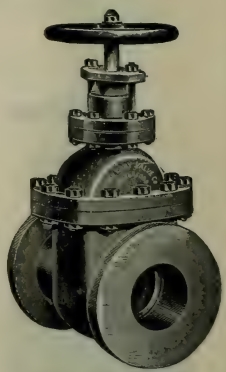


D-48. SCREWED ENDS.

TESTED TO A WATER PRESSURE OF 600 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING STEAM PRESSURE OF 225 POUNDS OR, IF WITH RIBBED BODIES AND COVERS, 250 POUNDS.

The Stems are of Solid Bronze. The Valves are so made that the Stuffing Box can be repacked under pressure. The Case Rings are double joint and heavy, to permit their being unscrewed from the Body and replaced after they have been ground to the Gate Rings.

The Body and Cover Flanges are grooved to hold packing. Rubber Packing is used for Gaskets, unless a different construction is preferred.



D-49. FLANGED ENDS.

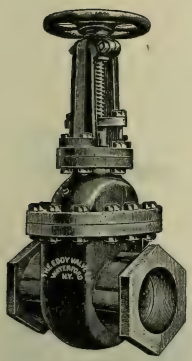
EDDY HIGH PRESSURE IRON BODY GATE VALVES.—D-48 and D-49.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
SCREWED OR FLANGED ENDS . . . . . EACH	17.50	23.50	29.00	37.50	41.50	50.00	60.00	74.00	85.50	97.00
TONGUED AND GROOVED FLANGES, EXTRA . EACH	.75	.75	1.00	1.30	1.30	1.30	1.75	2.00	2.00	2.25
IF RIBBED, EXTRA . . . . . EACH	1 30	1.65	2.50	3.25	3.50	4.00	4.00	5.00	5.75	6.25
BY-PASS WITH INSIDE STEM, EXTRA . . . . EACH	-----	-----	-----	-----	-----	-----	-----	21.25	21.25	24.00
BY-PASS WITH O. S. AND Y., EXTRA . . . . EACH	-----	-----	-----	-----	-----	-----	-----	25.00	25.00	30.00
SPUR GEARING, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	15.00	15.00	15.00
BEVEL GEARING, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	17.50	17.50	17.50
INDICATOR, EXTRA . . . . . EACH	1.80	2.50	3.00	3.00	3.25	3.25	3.25	3.50	3.50	4.00
DRILLING END FLANGES, EXTRA . . . . . EACH	.85	.85	1.25	1.25	1.50	1.50	1.50	1.75	2.50	2.50
END TO END, SCREWED ENDS . . . . . INCHES	6½	6⅝	8½	9½	9½	10½	10½	11½	12½	12½
FACE TO FACE, FLANGED, NO BY-PASS . . INCHES	8½	9½	11½	11½	12	13½	15	15½	16½	16½
FACE TO FACE, FLANGED, WITH BY-PASS INCHES	-----	-----	-----	-----	-----	-----	-----	18½	20	20⅝
DIAMETER OF END FLANGES . . . . . INCHES	6½	7½	9	9	10	10½	11	13	14	15
SIZE OF BY-PASS . . . . . INCHES	-----	-----	-----	-----	-----	-----	-----	1¼	1½	1½

SIZE OF VALVE . . . . . INCHES	9	10	12	14	15	16	18	20	22	24
SCREWED OR FLANGED ENDS . . . . . EACH	110.00	125.00	162.00	200.00	250.00	275.00	310.00	375.00	-----	-----
TONGUED AND GROOVED FLANGES, EXTRA . EACH	2.25	3.00	3.25	3.25	4.00	4.50	5.00	5.50	6.00	7.00
IF RIBBED, EXTRA . . . . . EACH	7.75	9.00	10.50	12.00	13.00	14.00	16.00	20.00	24.00	30.00
BY-PASS WITH INSIDE STEM, EXTRA . . . . EACH	24.00	24.00	40.00	40.00	40.00	48.00	48.00	65.00	65.00	65.00
BY-PASS WITH O. S. AND Y., EXTRA . . . . EACH	30.00	30.00	48.00	48.00	48.00	52.00	52.00	70.00	70.00	70.00
SPUR GEARING, EXTRA . . . . . EACH	15.00	15.00	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
BEVEL GEARING, EXTRA . . . . . EACH	17.50	17.50	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
INDICATOR, EXTRA . . . . . EACH	4.00	4.50	5.00	5.00	5.00	6.00	8.00	8.00	8.00	8.00
DRILLING END FLANGES, EXTRA . . . . . EACH	2.50	3.00	4.00	4.00	5.20	5.20	6.00	6.00	6.00	6.00
END TO END, SCREWED ENDS . . . . . INCHES	13½	14½	15½	-----	-----	-----	-----	-----	-----	-----
FACE TO FACE, FLANGED, NO BY-PASS . . INCHES	17½	18	19¼	21½	21½	21½	33½	35½	35½	35½
FACE TO FACE, FLANGED, WITH BY-PASS INCHES	21½	22¾	23¾	25⅞	26⅝	32⅞	33½	35½	35½	35½
DIAMETER OF END FLANGES . . . . . INCHES	16	17½	20	23	23½	25	27½	29	31	34
SIZE OF BY-PASS . . . . . INCHES	1½	1½	2	2	2	3	3	4	4	4

If Steel Stems are preferred and it is so stated when ordering, they will be furnished without additional cost. By-Pass Valves have Flanged Ends. Up to and including 2-inch they are of Brass; larger sizes are Iron Body, Bronze Mounted, have Inside Stem or Outside Stem and Yoke as desired, and have Flanged Ends. The Indicator listed is of the Needle and Slot Style.

EDDY HIGH PRESSURE GATE VALVES.



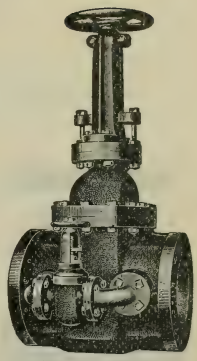
D-53. SCREWED ENDS.

**IRON BODY, BRONZE MOUNTED.
PARALLEL SEAT, DOUBLE GATE.
PLAIN OR RIBBED BODIES.
OUTSIDE STEM AND YOKE.**

TESTED TO A WATER PRESSURE OF 600 POUNDS PER SQUARE INCH. SUITABLE FOR A WORKING STEAM PRESSURE OF 225 POUNDS OR, IF WITH RIBBED BODIES AND COVERS, 250 POUNDS.

The Stems are of Solid Bronze. The Valves are so made that the Stuffing Box can be repacked under pressure. The Case Rings are double joint and heavy, to permit their being unscrewed from the Body and replaced after they have been ground to the Gate Rings.

The Body and Cover Flanges are grooved to hold packing. Rubber Packing is used for Gaskets unless a different construction is preferred.



D-54. FLANGED ENDS.

EDDY HIGH PRESSURE IRON BODY GATE VALVES.—D-53 and D-54.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
SCREWED OR FLANGED ENDS . . . . . EACH	19.75	26.50	33.00	43 00	47.50	58.00	68.50	84.50	98.50	111.00
TONGUED AND GROOVED FLANGES, EXTRA. EACH	.75	.75	1.00	1.30	1.30	1.30	1.75	2.00	2.00	2.25
IF RIBBED, EXTRA . . . . . EACH	1.30	1.65	2.50	3.25	3.50	4.00	4.00	5.00	5.75	6.25
BY-PASS WITH INSIDE STEM, EXTRA . . . EACH	-----	-----	-----	-----	-----	-----	-----	21.25	21.25	24.00
BY-PASS WITH O. S. & Y., EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	25.00	25.00	30.00
SPUR GEARING, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	15.00	15.00	15.00
BEVEL GEARING, EXTRA . . . . . EACH	-----	-----	-----	-----	-----	-----	-----	17.50	17.50	17.50
DRILLING END FLANGES, EXTRA . . . . . EACH	.85	.85	1.25	1.25	1.50	1.50	1.50	1.75	2.50	2.50
END TO END, SCREWED ENDS . . . . . INCHES	6½	6⅝	8½	9⅛	9⅛	10⅛	10½	11½	12¼	12¾
FACE TO FACE, FLANGED, NO BY-PASS . INCHES	8½	9½	11½	11⅝	12	13¼	15	15⅝	16½	16½
FACE TO FACE, FLANGED, WITH BY-PASS. INCHES	-----	-----	-----	-----	-----	-----	-----	18½	20	20⅝
DIAMETER OF END FLANGES . . . . . INCHES	6½	7½	9	9	10	10½	11	13	14	15
SIZE OF BY-PASS . . . . . INCHES	-----	-----	-----	-----	-----	-----	-----	1¼	1¼	1½
CENTER OF PORT TO TOP OF HAND WHEEL NUT. . INCHES	14½	15 2/16	19⅜	23 1/16	24½	25 2/16	26½	28½	31⅜	36⅜
CENTER OF PORT TO TOP OF STEM—OPEN . . . . INCHES	17	18½	23	27½	29¼	30⅝	32	35½	39¼	45½

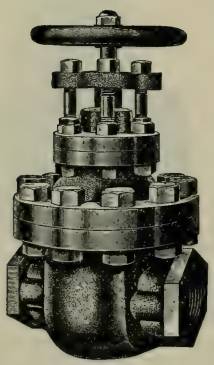
SIZE OF VALVE . . . . . INCHES	9	10	12	14	15	16	18	20	22	24
SCREWED OR FLANGED ENDS . . . . . EACH	127.00	142.50	185.00	225.00	280.00	310.00	350.00	425.00	-----	-----
TONGUED AND GROOVED FLANGES, EXTRA. EACH	2.25	3.00	3.25	3.25	4.00	4.50	5.00	5.50	6.00	7.00
IF RIBBED, EXTRA . . . . . EACH	7.75	9.00	10.50	12.00	13.00	14.00	16.00	20.00	24.00	30.00
BY-PASS WITH INSIDE STEM, EXTRA . . . EACH	24.00	24.00	40.00	40.00	40.00	48.00	48.00	65.00	65.00	65.00
BY-PASS WITH O. S. & Y., EXTRA . . . . . EACH	30.00	30.00	48.00	48.00	48.00	52.00	52.00	70.00	70.00	70.00
SPUR GEARING, EXTRA . . . . . EACH	15.00	15.00	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
BEVEL GEARING, EXTRA . . . . . EACH	17.50	17.50	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
DRILLING END FLANGES, EXTRA . . . . . EACH	2.50	3.00	4.00	4.00	5.20	5.20	6.00	6.00	6.00	6.00
END TO END, SCREWED ENDS . . . . . INCHES	13½	14½	15½	-----	-----	-----	-----	-----	-----	-----
FACE TO FACE, FLANGED, NO BY-PASS . INCHES	17½	18	19½	21½	21½	21½	33½	35½	35½	35¾
FACE TO FACE, FLANGED, WITH BY-PASS. INCHES	21½	22¾	23¾	25½	26½	32½	33½	35½	35½	35¾
DIAMETER OF END FLANGES . . . . . INCHES	16	17½	20	23	23½	25	27½	29	31	34
SIZE OF BY-PASS . . . . . INCHES	1½	1½	2	2	2	3	3	4	4	4
CENTER OF PORT TO TOP OF HAND WHEEL NUT. . INCHES	38 6/16	42½	46	54½	55¼	58½	65	70	76½	82⅝
CENTER OF PORT TO TOP OF STEM—OPEN . . . . INCHES	48½	53⅜	59¼	69¾	71⅝	75⅝	81⅛	91½	99⅓	107¾

If Steel Stems are preferred, and it is so stated when ordering, they will be furnished without additional cost. The Stem and Nut being exposed gives free access for oiling etc. The Stem rising to the same height that the gates are lifted, is a positive indicator, showing the position of the Gates at all times. The Hand Wheel is fastened to the Nut in the Yoke and does not rise with the Stem.

By-Pass Valves have Flanged Ends. Up to and including 2 inch they are of Brass; larger sizes are of Iron Body, Bronze Mounted, and have Inside Stem or Outside Stem and Yoke, as desired.

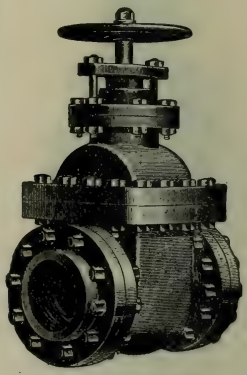
EDDY HYDRAULIC GATE VALVES.

TAPER SEAT. INSIDE STEM. DOUBLE GATE.



D-55. SCREWED ENDS.

TESTED TO 1200 AND 2400 POUNDS WATER PRESSURE PER SQUARE INCH. WORKING PRESSURE 600 AND 1200 POUNDS.



D-56. FLANGED ENDS.

1200 POUND TEST VALVES.—D-55 and D-56.

SIZE OF VALVE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED ENDS . . . . . EACH	35.00	45.00	55.00	65.00	75.00	90.00	110.00	130.00	150.00	190.00	250.00
FLANGED ENDS . . . . . EACH	40.00	50.00	65.00	70.00	85.00	100.00	125.00	150.00	165.00	215.00	275.00
END TO END, SCREWED ENDS . . INCHES	8⅜	9	9¾	10	11½	12½	15	18	19	22	25
END TO END, FLANGED ENDS . . INCHES	8½	9⅛	10½	12	13½	15	18	21	24	27	30
DIAMETER OF END FLANGES . . . INCHES	8½	9	9¼	10	11	12½	13½	15	16	19	22¼

2400 POUND TEST VALVES.—D-55 and D-56.

SIZE OF VALVE . . . . . INCHES	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED ENDS . . . . . EACH	46.00	55.00	75.00	85.00	100.00	115.00	150.00	170.00	190.00	250.00	315.00
FLANGED ENDS . . . . . EACH	52.00	65.00	85.00	95.00	115.00	135.00	175.00	190.00	215.00	275.00	360.00
END TO END, SCREWED ENDS . . INCHES	11¼	12⅞	14½	16⅛	17¾	19⅜	21	23	25	27	29
END TO END, FLANGED ENDS . . INCHES	10	12	14	16	18	21¼	23	25	28	30	33
DIAMETER OF END FLANGES . . . INCHES	9	9¼	10	11	12½	13½	15	16	19	21	23½

Companion Flanges bolted on, extra.

The Eddy Hydraulic Gate Valve is intended for natural gas, oil, and hydraulic work, for testing and other purposes. Special care and inspection are given every valve to insure its being perfect before leaving the factory. Can be furnished all Iron when so ordered.

All parts of these Valves are thoroughly bronze mounted and are exceedingly heavy and of the best material, being specially designed to withstand the enormous working pressure for which such Valves are required.

AMERICAN BRASS GATE VALVES.

PARALLEL SEAT. DOUBLE GATES. COMPOUND WEDGE.



D-70. BRASS GATE VALVE.

TESTED TO A WATER PRESSURE OF 200 POUNDS PER SQUARE INCH. SUITABLE FOR A WATER WORKING PRESSURE OF 125 POUNDS AND FOR A STEAM WORKING PRESSURE OF 80 POUNDS.



D-71. TEE HEAD GATE VALVE.

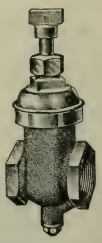
AMERICAN BRASS GATE VALVES.—D-70 and D-71.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
D-70 . . . . . EACH	1.30	1.75	2.50	3.50	5.00	7.50	15.00	22.00
D-71 . . . . . EACH	1.75	2.25	3.00	4.00	5.75	8.50	17.00	25.00



D-72. DRIP VALVE WITH WHEEL.

AUTOMATIC DRIP GATE VALVES ARE SUITABLE FOR RAILROAD WATER PIPES, FIRE PROTECTION AND STREET SPRINKLING STAND PIPES, OR FOR ANY PURPOSE WHERE PIPES ARE TO BE DRAINED.



D-73. SERVICE GATE WITH DRIP.

AMERICAN BRASS AUTOMATIC DRIP GATE VALVES.—D-72 and D-73.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3
EACH	3.00	3.75	5.10	7.75	11.50	23 00	33.75

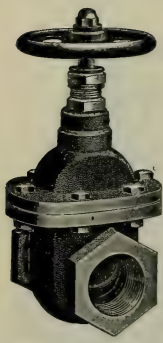
The American Automatic Drip Gate Valve is for use on Water Pipes when necessary to drain off the water after the supply has been cut off by closing the main Valve. When the Gate Valve is opened, the Waste closes and remains closed as long as the Valve is open. When the Gate Valve is closed, the Waste opens and remains so as long as the Valve is closed, insuring perfect drainage. The Drip Outlet is tapped for drain pipe.

Service Gate Valves with Drip, as shown in D-72 and D-73, are especially suitable for use as Stop and Waste Valves for the house supply pipes of Plumbing Systems.

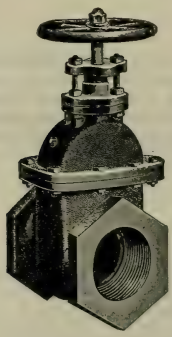
AMERICAN IRON BODY GATE VALVES.

PARALLEL SEAT. INSIDE STEM. DOUBLE GATE.

TESTED TO 150 POUNDS WATER PRESSURE PER SQUARE INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 60 POUNDS AND FOR A WORKING STEAM PRESSURE OF 50 POUNDS.



D-78. 7-INCH AND SMALLER.



D-79. 8-INCH AND LARGER.



D-80. FLANGE ENDS.

AMERICAN IRON BODY BRONZE MOUNTED GATE VALVES.—D-78, D-79 and D-80.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED OR FLANGED ENDS EACH	7.50	12.00	15.00	18.00	20.00	22.50	25.00	30.00	40.00	50.00	70.00	97.50
BY-PASS, EXTRA . . . . . EACH	----	----	----	----	----	----	----	----	----	----	----	42.00
SPUR GEARING, EXTRA . . EACH	----	----	----	----	----	----	----	----	----	----	----	25.00
BEVEL GEARING, EXTRA . . EACH	----	----	----	----	----	----	----	----	----	----	----	30.00
INDICATOR, EXTRA . . . . EACH	----	----	----	----	----	----	----	----	----	----	----	33.00
END TO END, SCREWED ENDS INCHES	6	6	7¼	7½	8	8½	9	10¼	11	11	11½	12
FACE TO FACE, FLANGED, NO BY-PASS . . . . . INCHES	5¾	6½	7¾	7¾	7¾	8½	9¼	9¾	11	11	12	12⅜
FACE TO FACE, FLANGED, WITH BY-PASS . . . . . INCHES	----	----	----	----	----	----	----	----	----	----	----	18
DIAMETER OF END FLANGES INCHES	6	7	7½	8½	9	9¼	10	11	12½	13½	16	19
SIZE OF BY-PASS . . . . . INCHES	----	----	----	----	----	----	----	----	----	----	----	2
APPROXIMATE WEIGHT . POUNDS	22	26	40	50	70	88	96	140	165	245	290	370

SIZE OF VALVE . . . . . INCHES	14	15	16	18	20	22	24	30	36	40	42	48
SCREWED OR FLANGED ENDS EACH	140.00	160.00	178.00	222.00	285.00	380.00	475.00	870.00	1,425.00	------	------	------
BY-PASS, EXTRA . . . . . EACH	42.00	42.00	70.00	70.00	70.00	70.00	100.00	100.00	160.00	160.00	160.00	200.00
SPUR GEARING, EXTRA . . EACH	25.00	25.00	30.00	30.00	30.00	30.00	30.00	------	------	------	------	------
BEVEL GEARING, EXTRA . . EACH	30.00	30.00	33.00	33.00	33.00	33.00	33.00	------	------	------	------	------
INDICATOR, EXTRA . . . . EACH	33.00	33.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
FACE TO FACE, FLANGED, NO BY-PASS . . . . . INCHES	12¾	12¾	13⅛	14	14½	15½	16	20	22	24	26	28
FACE TO FACE, FLANGED, WITH BY-PASS . . . . . INCHES	19	19	20	20	21	21	22½	22½	29	29	29	32
DIAMETER OF END FLANGES INCHES	21	22¼	23½	25	27½	29½	31½	38	44½	47¾	51	57½
SIZE OF BY-PASS . . . . . INCHES	2	2	3	3	3	3	4	4	6	6	6	8
APPROXIMATE WEIGHT . POUNDS	550	775	------	------	------	------	------	------	------	------	------	------

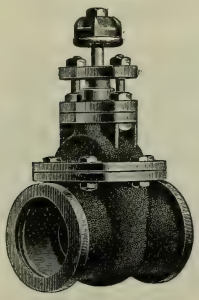
Valves with Flanged Ends are made from 2 inch to 72 inch inclusive. Prices of Valves 30 inch and larger include Spur or Bevel Gearing as required.

For further Flange dimensions, see page 62.

AMERICAN GATE VALVES.

PARALLEL SEAT.

TESTED TO A WATER PRESSURE OF 150 POUNDS PER SQ. INCH. SUITABLE FOR A WORKING WATER PRESSURE OF 60 POUNDS.



DOUBLE GATE.

ALL VALVES OPEN BY TURNING TO THE LEFT, UNLESS OTHERWISE ORDERED.

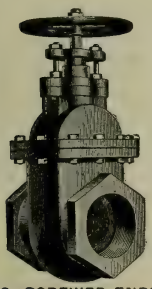
D-85. HUB ENDS.

AMERICAN IRON-BODY, BRASS MOUNTED GATE VALVES, HUB ENDS—D-85.

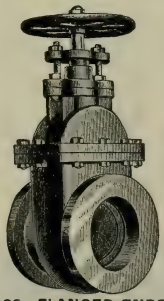
SIZE . . . . . INCHES	2	3	4	6	8	10	12	14	16	18	20	24	30	36
PRICE . . . . . EACH	10.00	15.00	20.00	30.00	50.00	70.00	97.50	140.00	178.00	222.00	285.00	475.00	870.00	1,425.00
BY-PASS, EXTRA . . . . EACH	-----	-----	-----	-----	-----	-----	42.00	42.00	70.00	70.00	70.00	100.00	100.00	160.00
END TO END OF HUB . . INCHES	7¼	9½	10¾	11¼	12½	13½	13½	14¼	15	15½	16½	19	19½	22
DEPTH OF HUB . . . . INCHES	2⅛	3	3	3	3¾	3¾	4	4	4	4¼	4½	4¼	4½	5
WEIGHT . . . . . POUNDS	22	40	80	140	240	325	415	575	800	900	1150	1575	3000	3940

Indicators extra. Prices of these Valves, 30-inch and larger, include Spur or Bevel Gearing as desired; on smaller sizes, extra.

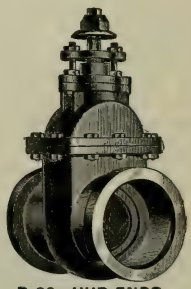
Prices of Valves larger than 36-inch will be given on application.



D-88. SCREWED ENDS.



D-89. FLANGED ENDS.



D-90. HUB ENDS

AMERICAN ALL-IRON GATE VALVES—D-88 and D-89.

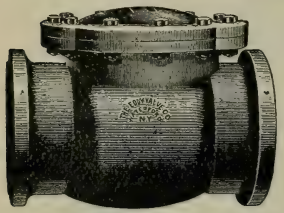
FOR GAS, AMMONIA, ETC.

SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12
SCREWED OR FLANGED ENDS . . . EACH	7.20	10.80	13.50	16.20	18.00	20.25	22.50	27.00	36.00	45.00	63.00	90.00

AMERICAN ALL-IRON GATE VALVES, HUB ENDS.—D-90.

SIZE . . . . . INCHES	2	3	4	6	8	10	12	14	16
EACH	7.20	13.50	18.00	27.00	45.00	63.00	87.00	126.00	160.00

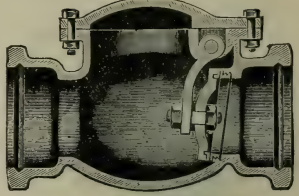
EDDY IRON BODY, BRONZE MOUNTED HORIZONTAL SWINGING CHECK VALVES.



D-91. HORIZONTAL CHECK VALVE, HUB END.

TESTED TO 300 POUNDS WATER PRESSURE PER SQUARE INCH.

WORKING WATER PRESSURE 125 POUNDS.



D-91. SECTIONAL VIEW.

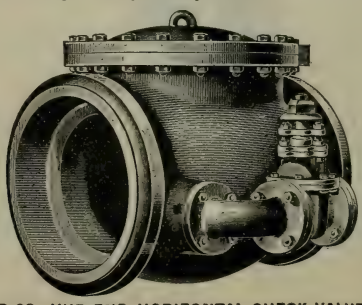
The body is of such form that sediment will not lodge against the Case Ring.
In all Valves the Gates can be removed through a hand hole or man hole in the body.
Valves 14-inch and larger usually have By-Pass Valves.
Valves 18-inch have 4-inch, 20-inch have 6-inch, and 24-inch have 8-inch secondary gates. Valves 30-inch and larger have the body in two sections and a valve plate between them, the latter having a number of openings controlled by separate gates.
By-Pass Valves of all sizes are of IRON BODY, BRONZE MOUNTED, with Inside Stems.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	5	6	7	8	10	12
SCREWED ENDS . . . . . EACH	7.00	7.75	9.75	14.50	20.50	25.50	31.00	37.00	44.50	77.50	97.00
FLANGED ENDS . . . . . EACH	9.00	10.00	11.00	15.50	21.50	27.00	32.50	38.50	46.00	76.50	95.00
HUB ENDS . . . . . EACH	----	-----	10.25	-----	20.50	25.00	28.50	-----	43.00	73.00	92.00
END TO END, SCREWED . . . . . INCHES	7¾	8½	11	11	12	14¾	14¾	16½	16½	23	24½
FACE TO FACE, FLANGED . . . . . INCHES	7⅞	8¾	10¾	11	11½	14	17	17¾	17¾	23	24½
DIAM. OF END FLANGES . . . . . INCHES	6	7	7½	8½	9	10	11	12½	13½	16	19
END TO END, HUB ENDS . . . . . INCHES	10½	11¼	15	15¼	17	19	19	21	21	24¾	27¼
INSIDE DIAM. OF HUB RIMS . . . . INCHES	3⅜	3¾	4½	4⅝	5¾	6⅝	7¾	9	9⅞	12	14
DEPTH OF HUBS . . . . . INCHES	2¼	2¾	4	4	4	4	4	4	4	4	4

SIZE OF VALVE . . . . . INCHES	14	16	18	20	24	30	36	42	48
FLANGED ENDS . . . . . EACH	125.00	140.00	200.00	255.00	350.00	1,150.00	1,850.00	------	------
HUB ENDS . . . . . EACH	120.00	135.00	190.00	250.00	340.00	1,075.00	1,725.00	------	------
BY-PASS, EXTRA . . . . . EACH	25.00	42.00	42.00	42.00	65.00	65.00	100.00	------	------
FACE TO FACE, FLANGED . . . . . INCHES	26½	30½	32½	35½	40	56	58	60	63
DIAM. OF END FLANGES . . . . . INCHES	21	23½	25	27½	31½	38	44½	51	57½
END TO END, HUB ENDS . . . . . INCHES	30½	32¾	37¾	40¾	42½	66	68	70	73½
INSIDE DIAM. OF HUB RIMS . . . . INCHES	16⅜	18½	20⅛	22¾	27	33½	39½	46	51½
DEPTH OF HUBS . . . . . INCHES	4½	4½	4⅜	4⅜	4½	5	5	5	5
SIZE OF BY-PASS . . . . . INCHES	2	3	3	3	4	4	6	6	8

Horizontal Check Valves 14-inch and larger usually have By-Passes.

IRON BODY, BRONZE MOUNTED.

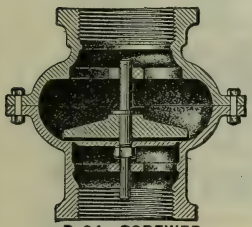


WITH BY-PASS.

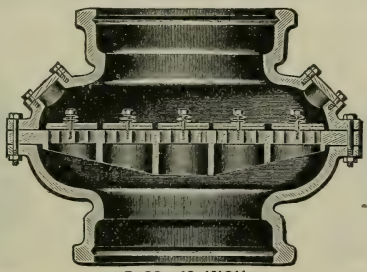
D-92. HUB END HORIZONTAL CHECK VALVE.

EDDY IRON BODY, BRONZE MOUNTED VERTICAL CHECK VALVES.

TESTED TO 300 POUNDS WATER PRESSURE PER SQUARE INCH. WORKING WATER PRESSURE 125 POUNDS.



D-94. SCREWED, 8-INCH AND SMALLER.



D-96. 10-INCH AND LARGER.



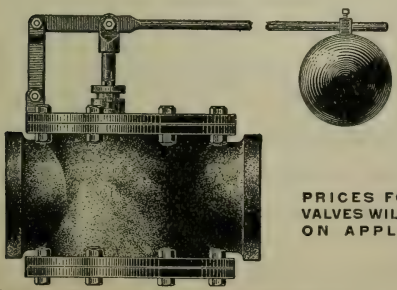
D-95. FLANGED, 8-INCH AND SMALLER.

EDDY VERTICAL CHECK VALVES.—D-94, D-95 and D-96.

SIZE OF VALVE . . . . . INCHES	2	2½	3	3½	4	5	6	7	8	10	12
SCREWED ENDS . . . . . EACH	7.50	8.00	12.70	14.25	16.50	22.50	29.00	32.50	37.00	92.00	125.00
FLANGED ENDS . . . . . EACH	8.00	8.50	12.70	14.25	16.50	22.00	28.00	31.50	36.50	92.00	125.00
HUB ENDS . . . . . EACH	8.00	----	12.70	-----	16.50	22.00	30.00	35.00	39.00	92.00	125.00
END TO END, SCREWED . . . . INCHES	7½	7½	8⅝	9½	10½	12½	13¾	13¾	14½	15⅛	------
FACE TO FACE, FLANGED . . . . INCHES	5½	5⅝	6	7	7½	9½	10¾	10¾	10¾	13	14⅛
DIAM. END FLANGES . . . . . INCHES	6	7	7½	8½	9	10	11	12½	13½	16	19
END TO END, HUB ENDS . . . . INCHES	8	----	13½	-----	14½	18¼	19½	-----	20	20	21¼
DEPTH OF HUBS . . . . . INCHES	2¼	----	4	-----	4	4	4	-----	4	4	4

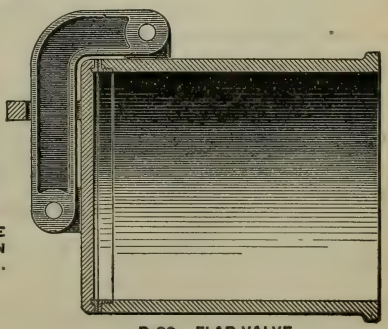
SIZE OF VALVE . . . . . INCHES	14	16	18	20	24	30	36
FLANGED ENDS . . . . . EACH	165.00	220.00	270.00	330.00	490.00	850.00	------
HUB ENDS . . . . . EACH	165.00	220.00	270.00	330.00	490.00	850.00	------
FACE TO FACE, FLANGED . . . . INCHES	18¼	18½	21	23½	24½	28⅝	38¼
DIAM. END FLANGES . . . . . INCHES	21	23½	25	27⅛	31⅛	38	44⅛
END TO END, HUB ENDS . . . . INCHES	26¼	27½	29¾	33¼	36½	41	50
DEPTH OF HUBS . . . . . INCHES	4½	4½	4⅝	4⅝	4½	5	5

These Valves have Rubber Faced Gates, which work upon Bronze Spindles in Bronze Bushings. Eight-inch and smaller Valves have Single Gates. Larger Valves have Small Rubber Gates mounted upon a Valve Plate between the upper and lower halves of the body. There are hand holes in the upper half through which the gates may be removed. The combined area of the gate openings in any Valve is greater than the area of the connecting pipe. For hot water the gates are of Iron with Bronze seat rings.



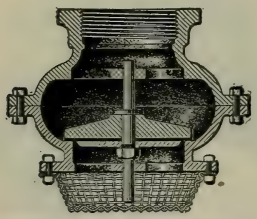
D-98. AUTOMATIC BALANCED FLOAT VALVE.

PRICES FOR THESE VALVES WILL BE GIVEN ON APPLICATION.



D-99. FLAP VALVE.

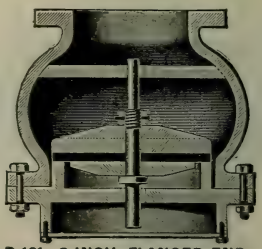
EDDY IRON BODY, BRONZE MOUNTED VERTICAL FOOT VALVES.



D-100. 7-INCH AND SMALLER, SCREWED END.

RUBBER FACED GATES.
BRASS WIRE SCREENS.

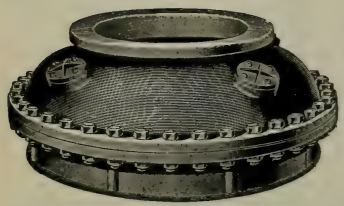
TESTED TO 200 POUNDS WATER PRESSURE PER SQUARE INCH.



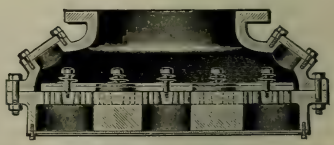
D-101. 8-INCH, FLANGED END.

VERTICAL FOOT VALVES, 8-INCH AND SMALLER.—D-100 and D-101.

SIZE . . . . . INCHES	2	2½	3	3½	4	5	6	7	8
SCREWED END . . . . . EACH	11.50	12 00	16.25	18.50	20.00	26.25	33 00	38.50	44.75
FLANGED END . . . . . EACH	11 75	12.25	16.25	18.50	20.00	25.75	32.50	38.00	43.50
HUB END . . . . . EACH	-----	-----	-----	-----	-----	-----	33.25	-----	46.50



D-105. FOOT VALVE, 10-INCH AND LARGER.



D-105. SECTIONAL. 10-INCH AND LARGER.

VERTICAL FOOT VALVES, 10-INCH AND LARGER.—D-105.

SIZE . . . . . INCHES	10	12	14	16	18	20	24	30	36
SCREWED END . . . . . EACH	82.00	115.00	------	------	------	------	------	------	------
FLANGED END . . . . . EACH	82.00	115 00	150.00	200.00	240.00	275.00	410 00	800.00	------
HUB END . . . . . EACH	82.00	115.00	150.00	200.00	240.00	275.00	410.00	800.00	------

Prices on sizes larger than 36-inch furnished upon application.

These Valves have Rubber Faced Gates that work upon Bronze Spindles in Bronze Bushings. The Rubber is of superior quality and the best for the purpose.

Valves in sizes 7-inch and smaller have basket-shaped Brass Screens. Larger sizes have Flat Brass Screens secured to the bottom of the Valve body.

All Valves 10-inch and larger have Small Rubber Gates mounted upon a Brass Valve Plate, that is bolted to the body as shown in D-105.

The gates may be removed through hand holes.

The combined area of the gate openings in any Valve is greater than the area of the connecting pipe.

For diameter of Flanges, etc., see page 62.



D-130. STANDARD FOR STATIONARY STEM.

EDDY VALVE STANDARDS.

Valve Standards, or Floor Stands, are used for supporting Extension Stems for Valves or Sluice Gates.

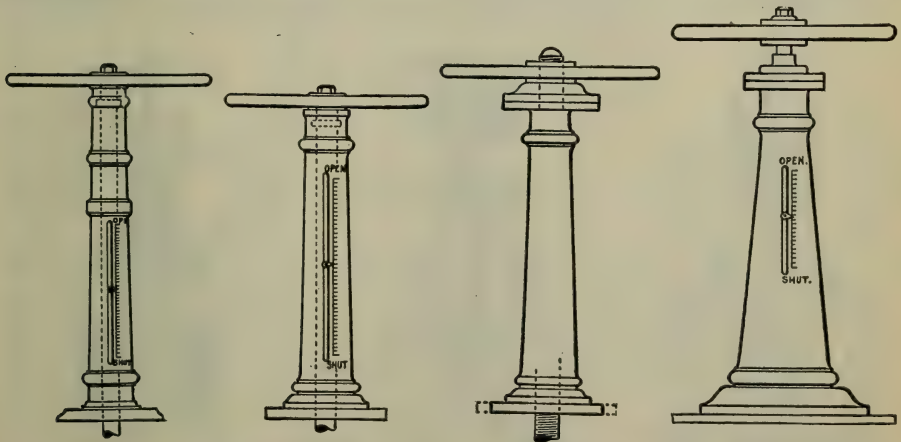
When it is necessary to know the position of the gates in the Valve, an Open and Shut or Rising Stem Indicator is used, as shown in Figure D-131 and at foot of page. Standards with Rising Stems are for use with Rising Stem Valves and Sluice Gates only.

In ordering Standards with Open and Shut or Rising Stem Indicator, it is necessary to give the size of Valves, the number of turns to open them, and their working pressures, and to state whether the Valves open by turning to the Right or Left; *providing* the Standards are for use in connection with Valves already in service or not of our make.



D-131. STANDARD FOR RISING STEM.

PATTERN	Light	Medium	Heavy	Extra Heavy
HEIGHT OF STANDARD . . . . . INCHES	36	37½	37	37
DIAMETER OF BASE . . . . . INCHES	11½	12	18	24
D-130. WITHOUT INDICATOR . . . . . EACH	15.00	22.50	30.00	40.00
D-130. WITH INDICATOR . . . . . EACH	25.00	35.00	45.00	55.00
D-131. WITH RISING STEM . . . . . EACH	20.00	28.00	40.00	53.00
ALL POLISHED, ADD . . . . . EACH	15.00	21.00	30.00	40.00

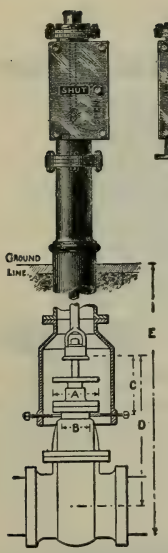


LIGHT. MEDIUM. HEAVY. EXTRA HEAVY.

When it is not essential that the position of the gates in the Valves be known, a Standard like Figure D-130 is used.

That the proper length of Extension Stem may be provided, when required, it is necessary to know the distance from center of Valve opening to top of floor on which the Standard sets.

IN ORDERING, ALWAYS STATE WHETHER STANDARDS ARE TO BE USED WITH VALVES THAT OPEN BY TURNING TO THE RIGHT OR LEFT.



D-135. VALVE INDICATOR POST.

EDDY INDICATOR POSTS.

These Posts are designed for use where it is desirable to know whether or not a Valve, in a line of pipe underground, or under a floor, is open or shut.

The words "Open" and "Shut" are on plates that indicate from either side of the Posts the position of the gates in the Valve.

Much damage may be caused as the result of Valves being closed when they should have been open, or vice versa. It is therefore important that Indicators be used in connection with the fire service in factories or mill yards.

The Indicator Post standing 30 inches above the surface of the ground, is preferable to a Valve Box, as it is never hidden by snow or dirt, and permits of the Valve being operated by a hand wrench at the top of the Post, thereby doing away with the use of a long socket wrench.

The Nut and Stem which operate the Indicator plates are of Bronze, thus insuring the durability of the mechanism of the Post.

A locking device for the Indicator Post can be furnished at a slight additional cost.

In ordering Indicator Posts for Valves, other than for the Eddy make, it is essential that we have the following information:

The size of Valves the Posts are to cover; whether the Valves are opened by turning to the right or left; the number of turns required to open each size Valve; the depth of trench as designated by the letter E, Figure D-135; the distance from the center of Valve port to bottom of squares on the stem nut, as shown by letter D.

Any other detail that can be given will be useful to us; as, the diameter of Stuffing Box A, diameter of neck of Cover B, and the name of the maker of the Valve.

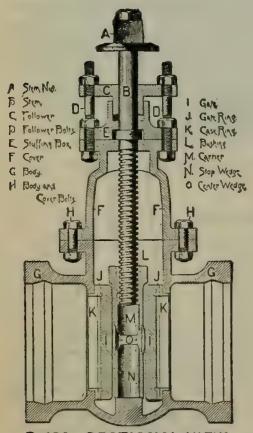
For Eddy Valves all we require is the depth of trench, how Valves turn to open, and the number of each size of Valves the Posts are to cover.

Unless otherwise specified in ordering, the size of operating nut will be made five-sided, ¾ inch on a side.

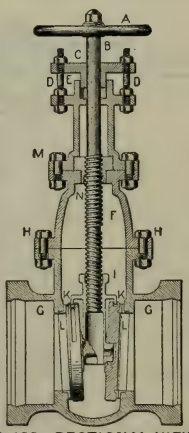
INDICATOR POST.—D-135.

FOR VALVE SET IN TRENCH 5 FEET DEEP . . . . . EACH	40.00
FOR EACH 6 INCHES INCREASE OR DECREASE IN DEPTH OF TRENCH, ADD OR DEDUCT	.80

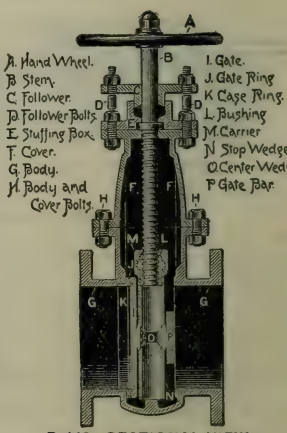
Price of Indicator Post does not include Valve or Box.



D-136. SECTIONAL VIEW.



D-138. SECTIONAL VIEW.

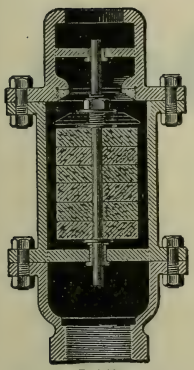


D-140. SECTIONAL VIEW.

American Parallel Seat Valves.—D-136. Sizes and list prices, pages 154 and 155.

Eddy Valve with Compound Screw.—D-138. This design is for use where it is desirable to have a Valve arranged so it can be opened or closed quickly. The compounding of the screw doubles the rapidity of operation.

American Single-Gate Valves.—D-140. This Valve is constructed for light water pressures from 20 to 50 pounds, and is made only in sizes 12 to 48 inch. Prices upon application.



D-141.
AUTOMATIC POPPET
AIR VALVE.

EDDY AIR VALVES.

Automatic Poppet Air Valves are for use at the summits of pipe lines to allow the air to escape from the pipe when being filled with water.

The Valve is drawn away from its seat by the vacuum caused when the pipe is being emptied, thus, air enters the pipe, and as it is filling, escapes until the Valve is floated to its seat and closed by the entering water.

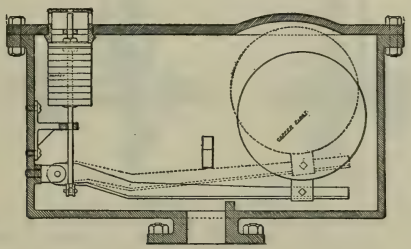
These Valves are not for use where air collects under pressure. For this purpose a combined Poppet and Float Air Valve, as shown and described below (D-142), should be used.

AUTOMATIC POPPET AIR VALVES.—D-141.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
*ALL BRONZE. . . . . EACH	3.50	6.00	7.50	9.50	12.00	17.00	25.00	------
†IRON BODY, BRONZE MOUNTED .EACH	------	7.00	7.50	8.00	9.00	10.00	14.00	20.00

*All Bronze Automatic Poppet Air Valves have both ends threaded outside.

†These Valves, Iron Body, Bronze Mounted, are made with either Flanged, Spigot, Screw Socket or Hub ends, as required, and have upper end, all sizes, tapped to connect with pipe to ground surface.



D-142.
SECTIONAL VIEW.
AUTOMATIC COMBINED FLOAT AND POPPET VALVE.
IRON BODY, BRONZE MOUNTED.

This Air Valve, as illustrated in D-142, is a combination of a Lever and Float and Poppet Valve. It is intended to free mains, carrying water or other liquids, from air and gases which collect at pipe line summits.

The float is weighted, and the length of its lever arm so proportioned, that the combined leverage will give sufficient power to overcome the net upward pressure, against the Poppet Valve seat, of the gases that have accumulated in the chamber. The pressure of the air or gases will be the same as that of the water in the main at that point, and when the main is in service the pressure will be more than sufficient to prevent an ordinary Poppet Valve from unseating.

This Valve is usually intended to have a two-inch opening, yet it can have any required size, but when it is designed to act under the maximum pressure which can prevail in the main it will be equally as efficient under lesser pressures.

Additional Poppet Valves, clustered in the same chamber, provide an opening of such a large vent in the main that they are effective in materially reducing the pressure.

Two Poppet Valves, if for light pressures, can be operated by a single float.

We believe that this Valve is the only one in the market that can be relied upon to positively act under a range of pressures from nothing up to the maximum desired.

The Valve will relieve the main from air while being filled, or will admit air in case of a break in the main, which for steel pipe lines is a safeguard against collapse.

In ordering, the conditions under which the Valve is to be used and the maximum water pressure to be expected, should be stated.

These Valves are tested before shipment, that their positive action, for any conditions required, may be determined.

Prices upon application.

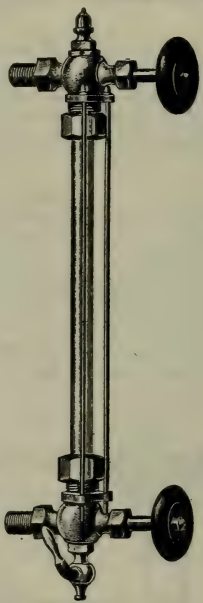
ENGINE AND BOILER TRIMMINGS.



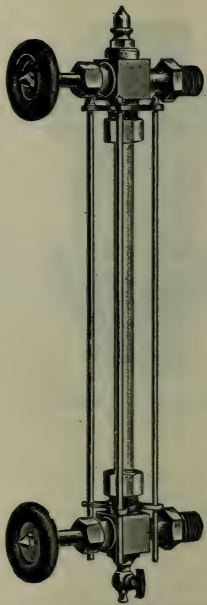
E-1.



E-3. ROUGH BODY.



E-5. FINISHED BODY.



E-7. FINISHED BODY.

WATER GAUGES.

FIGURE	E-1	E-3	E-3	E-3	E-5	E-5	E-7	E-7
THREADED FOR PIPE	½	⅜	½	¾	½	¾	½	¾
DIAMETER OF GLASS	⅜	⅜	⅜	¼	⅜	¼	⅜	¼
LENGTH OF GLASS	12	10	12	16	12	16	12	16
EACH	2.60	2.75	3.00	4.50	4.25	5.50	6.00	8.00

Extra Brass Guards, net, each: 12-in., 7c.; 14-in., 8c.; 16-in., 12c.; 18-in., 15c.

SCOTCH GLASS TUBES.

LENGTH . . . . INCHES	10	11	12	13	14	15	16	17	18	19	20	22	24	30	36	48	60
½–⅝-INCH . . . EACH	.25	.27	.30	.32	.35	.37	.40	.42	.45	.47	.50	.55	.60	.75	.90	1.21	1.51
¾-INCH . . . . . EACH	.30	.33	.36	.40	.43	.46	.49	.52	.55	.59	.62	.68	.74	.93	1.12	1.50	1.88
1-INCH . . . . . EACH	.51	.56	.61	.66	.71	.76	.81	.86	.91	.96	1.01	1.12	1.22	1.52	1.83	2.43	3.04

Sizes over 24 inches long, Special Discount. Glasses up to 10 feet long carried in stock.



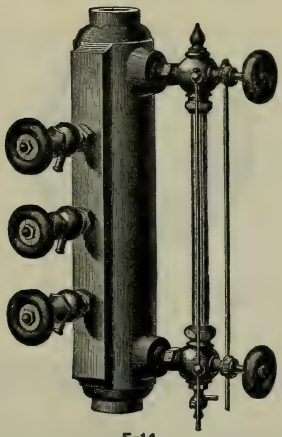
E-9.

GILBERT'S SELF-PACKING GAUGE GLASS PRESERVER.—E-9.

SIZE . . . . . INCHES	½	⅝	¾	1	1¼
PRICE . . . . . PER DOZEN	.75	.75	.75	1.35	1.35

CHESTERTON'S GLASS TUBE CUTTERS.

Each, . . 2.00



E-14.

WATER GAUGE COLUMN WITH TRIMMINGS.—E-14.

NUMBER	1	2	3	4	5	6
WITH BRASS CASE GAUGE, SIPHON, GAUGE COCKS AND WATER GAUGE EACH	12.00	13.00	14.50	20.50	22.00	24.50
WITH IRON CASE GAUGE, SIPHON, GAUGE COCKS AND WATER GAUGE EACH	9.00	9.50	11.50	19.00	21.00	22.00
DIAMETER OF STEAM GAUGE INCHES	5	5	5	6	6	6
STYLE OF WATER GAUGE	Rough	Rough	Finished	Finished	Finished	Finished
NUMBER OF GUARDS	2	2	2	2	4	4
SIZE OF WATER GAUGE GLASS INCHES	$\frac{5}{8}$x10	$\frac{5}{8}$x12	$\frac{5}{8}$x12	$\frac{3}{4}$x16	$\frac{3}{4}$x12	$\frac{3}{4}$x16
SIZE OF GAUGE COCKS INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$

WATER GAUGE COLUMN ONLY.—E-14.

NUMBER	1	2	3	4	5	6
LENGTH OVER ALL INCHES	$14\frac{5}{8}$	$16\frac{3}{4}$	$19\frac{7}{8}$	$23\frac{1}{2}$	$25\frac{3}{4}$	28
OUTSIDE DIAMETER INCHES	$2\frac{5}{8}$	3	$3\frac{3}{8}$	4	$4\frac{3}{4}$	$5\frac{1}{2}$
TAPPED FOR BOILER CONNECTION INCHES	$\frac{3}{4}$	$\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$
TAPPED FOR GAUGE COCKS INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
TAPPED FOR WATER GAUGE INCHES	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
PRICE EACH	1.50	2.25	3.00	4.25	6.50	8.00



E-19. WITHOUT STUFFING-BOX.



E-22. WITH STUFFING-BOX.



E-25. REGESTER GAUGE COCK.

GAUGE COCKS.

SIZE INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$
E-19, WOOD HANDLE EACH	1.10	1.20	1.35
E-22, WOOD HANDLE, WITH STUFFING-BOX EACH	1.35	1.50	1.70
E-25, REGESTER GAUGE COCK EACH	1.00	1.00	1.00



E-27. CLOW FUSIBLE PLUG.

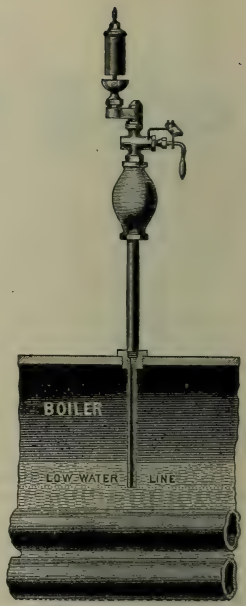


E-29.
ENGINE ROOM CLOCKS.
PRICES ON APPLICATION.

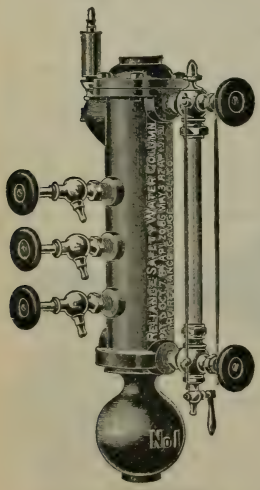
CLOW SECURITY FUSIBLE PLUG AND LOW-WATER ALARM.—E-27.

Our Alarm is a positive indicator of low water. When the metal fuses, it is forced by the pressure of escaping steam into the upper part of the offset, and the steam free of the metal operates the whistle. Directions for attaching and operating accompany each Alarm.

Complete with Lock and Key, each, $6.00.
Extra Fusible Plugs, each, 50 cents.



E-27. CONNECTION TO BOILER.



E-30. COLUMN NO. 1.

RELIANCE SAFETY WATER COLUMNS.—E-30.

COMBINED HIGH AND LOW WATER ALARMS.

NUMBER	1	1½	5	7	9	11	13	15
KIND AND SIZE OF BOILER . IN.	36 to 54	36 to 54	54 to 72	Water Tube	Vertical	Vertical	Vertical	Vertical
STEAM AND WATER CONNECTIONS . . . . . IN.	1	1½	1½	1½	1½	1½	1½	1½
BLOW OFF . . . . . IN.	¾	¾	¾	¾	1	1	1	1
COMPLETE . . . . . EACH	35.00	35.00	40.00	45.00	50.00	55.00	*65.00	*70.00

LOW WATER ALARMS

NUMBER	2	6	8
KIND AND SIZE OF BOILER . . . . . INCHES	36 to 54	54 to 72	Vertical
STEAM AND WATER CONNECTIONS . . . INCHES	1	1¼	1½
BLOW OFF . . . . . INCHES	¾	¾	¾
COMPLETE . . . . . EACH	32.00	38.00	45.00

*Two glasses joined at center with stuffing box. Four gauge cocks.

NOTE. In ordering, never fail to state whether the gauge cocks should be at the right or left of the water gauge. Columns with the cocks at the right of the water gauge are *right hand columns*, and those with the cocks at the left of the water gauge are *left hand columns*. The column here shown is left hand column. Larger sizes made to order.

SINGLE SPRING PRESSURE OR VACUUM GAUGES.—E-33.



E-33.

STYLE OF CASE	Iron, with Brass Ring.	Iron, with N. P. Ring.	Brass.	N. P. or Silver Metal.	Brass Deep Case, O. G. or Oct. Ring.	N. P. Deep Case, O. G. or Oct. Ring.
12 -INCH DIAL . EACH	50.00	51.50	75.00	79.00	80.00	84.00
10 -INCH DIAL . EACH	32.00	33.00	40.00	43.00	44.00	47.00
8¾-INCH DIAL . EACH	22.00	22.75	30.00	32.50	33.50	36.00
6¾-INCH DIAL . EACH	16.00	16.60	20.00	22.00	23.00	25.00
6 -INCH DIAL . EACH	13.00	13.50	16.00	17.50	18.50	20.00
5¼-INCH DIAL . EACH	10.00	10.25	12.00	13.25	13.75	15.00
5 -INCH DIAL . EACH	8.00	8.20	11.00	12.00	12.50	13.50
4½-INCH DIAL . EACH	8.00	8.20	10.00	11.00	11.50	12.50
3¾-INCH DIAL . EACH	7.00	7.18	9.00	9.75	10.25	11.00
3 -INCH DIAL . EACH	6.00	6.15	8.00	8.60	9.25	9.75
2½-INCH DIAL . EACH	6.00	6.15	8.00	8.60	-----	-----
2 -INCH DIAL . EACH	6.00	6.15	8.00	8.60	-----	-----

DOUBLE SPRING BOURDON PRESSURE GAUGES.—E-36.



E-36.

STYLE OF CASE	Iron, Japanned.	Iron, with N. P. Ring.	Brass.	Nickel Plated.	Brass Deep Case, O. G. or Oct. Ring.	N. P. Deep Case, O. G. or Oct. Ring.
12 -INCH DIAL . EACH	55.00	56.50	80.00	84.00	85.00	89.00
10 -INCH DIAL . EACH	37.00	38.00	45.00	48.00	49.00	52.00
8½-INCH DIAL . EACH	25.00	25.75	34.00	36.50	37.50	40.00
6¾-INCH DIAL . EACH	18.00	18.60	22.00	24.00	25.00	27.00
6 -INCH DIAL . EACH	15.00	15.50	18.00	19.50	20.75	22.25
5½-INCH DIAL . EACH	12.00	12.25	14.00	15.25	16.25	17.50
5 -INCH DIAL . EACH	11.00	11.20	13.00	14.00	15.00	16.00
4½-INCH DIAL . EACH	10.00	10.20	12.00	13.00	13.75	14.75

Gauges furnished with connection through the back, if so desired. In ordering, state size, whether iron or brass, and pressure.

STANDARD TEST GAUGES.—E-39.

SPRINGS OF SOLID DRAWN OR BRAZED TUBE.



E-39.

STYLE OF CASE	Brass.	Nickel Plated.
10 -INCH DIAL . . . . . EACH	50.00	53.00
8½-INCH DIAL . . . . . EACH	40.00	42.50
6¾-INCH DIAL . . . . . EACH	30.00	32.00
6 -INCH DIAL . . . . . EACH	25.00	26.50
5½-INCH DIAL . . . . . EACH	20.00	21.25
4½-INCH DIAL . . . . . EACH	16.00	17.00
3½-INCH DIAL . . . . . EACH	14.00	14.75
3 -INCH DIAL . . . . . EACH	14.00	14.60

Above prices are for all Pressures up to 1,000 pounds.

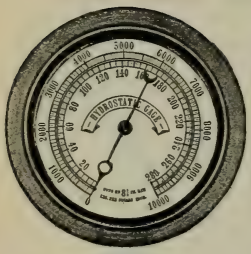
LOW PRESSURE STEAM HEATING GAUGES.—E-42.



E-42.

STYLE OF CASE	Iron, with Brass Ring.	Iron, with N. P. Ring.	Brass.	Nickel Plated.
6 -INCH DIAL . . . . . EACH	13.00	13.50	16.00	17.50
5½-INCH DIAL . . . . . EACH	10.00	10.25	12.00	13.25
5 -INCH DIAL . . . . . EACH	8.00	8.20	11.00	12.00
4½-INCH DIAL . . . . . EACH	8.00	8.20	10.00	11.00
3½-INCH DIAL . . . . . EACH	7.00	7.18	9.00	9.75
3 -INCH DIAL . . . . . EACH	6.00	6.15	8.00	8.60
2½-INCH DIAL . . . . . EACH	6.00	6.15	8.00	8.60
2 -INCH DIAL . . . . . EACH	6.00	6.15	8.00	8.60

Prices of E-33 and E-36 include Cocks.



E-45.

HYDRAULIC GAUGES.—E-45.

STYLE OF CASE	Iron, with Brass Ring.	Iron, with N.P. Ring.	Brass.	Nickel Plated.
12-IN. DIAL . . . . . EACH	110.00	111.50	125.00	129.00
10-IN. DIAL . . . . . EACH	90.00	91.00	100.00	103.00
8½-IN. DIAL . . . . . EACH	70.00	70.75	80.00	82.50
6½-IN. DIAL . . . . . EACH	50.00	50.60	60.00	62.00
6 -IN. DIAL . . . . . EACH	35.00	35.50	40.00	41.50
5 -IN. DIAL, FOR PRESSURES NOT OVER 2,500 LBS. . EACH	30.00	30.50	35.00	36.00
4½-IN. DIAL, FOR PRESSURES NOT OVER 2,500 LBS. . EACH	25.00	25.40	30.00	31.00
3½-IN. DIAL, FOR PRESSURES NOT OVER 2,500 LBS. . EACH	22.00	22.50	26.00	26.75

These Gauges can be furnished up to 20,000 lbs. pressure.

A Check Valve is almost indispensable in using a hydraulic gauge, as the pressure is often suddenly removed, and the momentum of the hand will throw the gauge out of gear and otherwise damage it. A Check Valve prevents difficulties of this kind.



E-47.

COMPOUND PRESSURE AND VACUUM GAUGES.—E-47.

FOR PRESSURES UP TO 300 LBS.

STYLE OF CASE	Iron, Japanned.	Iron, with N. P. Ring.	Brass.	Nickel Plated.	Brass Deep Case, O.G. or Oct. Ring.	N. P. Deep Case, O. G. or Oct. Ring.
12-IN. DIAL . . . . . EACH	60.00	61.50	80.00	84.00	85.00	89.00
10-IN. DIAL . . . . . EACH	40.00	41.00	50.00	53.00	54.00	57.00
8½-IN. DIAL . . . . . EACH	30.00	30.75	40.00	42.50	43.50	46.00
6½-IN. DIAL . . . . . EACH	20.00	20.60	25.00	27.00	28.00	30.00
6 -IN. DIAL . . . . . EACH	16.00	16.50	20.00	21.50	23.00	24.50
5½-IN. DIAL . . . . . EACH	14.00	14.25	16.00	17.25	18.50	19.75
4½-IN. DIAL . . . . . EACH	13.00	12.20	14.00	15.00	16.00	17.00
3½-IN. DIAL . . . . . EACH	10.00	10.18	12.00	12.75	13.75	14.50

These Gauges can be furnished for any pressure desired.



E-48.

COMBINATION WATER PRESSURE GAUGES.—E-48.

SPRINGS OF SOLID DRAWN OR BRAZED TUBE. FOR PRESSURES UP TO 500 LBS.

STYLE OF CASE	Iron, Japanned.	Iron Case, N. P. Ring.	Brass.	Nickel Plated.	Brass Deep Case, O. G. or Oct. Ring.	N. P. Deep Case, O. G. or Oct. Ring.
12-IN. DIAL . . . . . EACH	60.00	61.50	80.00	84.00	85.00	89.00
10-IN. DIAL . . . . . EACH	40.00	41.00	50.00	53.00	54.00	57.00
8½-IN. DIAL . . . . . EACH	30.00	30.75	40.00	42.50	43.50	46.00
6½-IN. DIAL . . . . . EACH	20.00	20.60	25.00	27.00	28.00	30.00
6 -IN. DIAL . . . . . EACH	16.00	16.50	20.00	21.50	23.00	24.50
5½-IN. DIAL . . . . . EACH	14.00	14.25	16.00	17.25	18.50	19.75

Above prices include Cock. These Gauges can be furnished for pressures up to 1,000 lbs.



E-49.

AMMONIA GAUGES.—E-49.

FOR ICE AND REFRIGERATING MACHINES. FOR PRESSURES UP TO 500 LBS.

STYLE OF CASE	Iron Case and Ring.	Iron Case, N. P. Ring.
8 OR 8½-IN. DIAL . . . . . EACH	45.00	45.75
6½-IN. DIAL . . . . . EACH	40.00	40.60
6 -IN. DIAL . . . . . EACH	35.00	35.50
5 -IN. DIAL . . . . . EACH	30.00	30.00
4½-IN. DIAL . . . . . EACH	25.00	25.00
3½-IN. DIAL . . . . . EACH	25.00	25.00

These Gauges can be furnished for pressures up to 2,500 lbs.

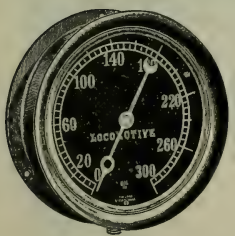


E-51

ALTITUDE GAUGES.—E-51.

STYLE OF CASE	Iron, Japanned.	Iron, with N. P. Ring.
6 -INCH DIAL EACH	16.00	16.50
5½-INCH DIAL EACH	14.00	14.25
5 -INCH DIAL EACH	14.00	14.25
4½-INCH DIAL EACH	12.00	12.20
3½-INCH DIAL EACH	10.00	10.18

Above prices include Cock.

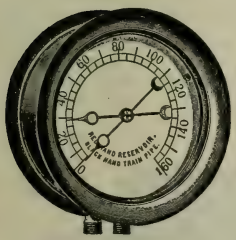


E-52.

LOCOMOTIVE GAUGES.—E-52.

STYLE OF CASE	Iron, Japanned.	Iron, with N. P. Ring.	Brass.	Nickel Plated.
6 -INCH DIAL EACH	15.00	15.50	18.00	19.50
6½-INCH DIAL EACH	18.00	18.60	22.00	24.00

The above prices include Cock. These Gauges we can furnish with either White or Black Dials.



E-53.

THE NEW WESTINGHOUSE DUPLEX GAUGES.—E-53.

We not only recommend, but we guarantee, this gauge to be superior to any duplex gauge manufactured, for accuracy, durability, compactness, and finish.

These gauges are used on all the principal railroads.

The ring of gauge is screwed down to shoulder, and makes the case perfectly dust-proof.

N. B.—We are ready to send for trial, at our own expense, a sample gauge, to be paid for only when accepted.

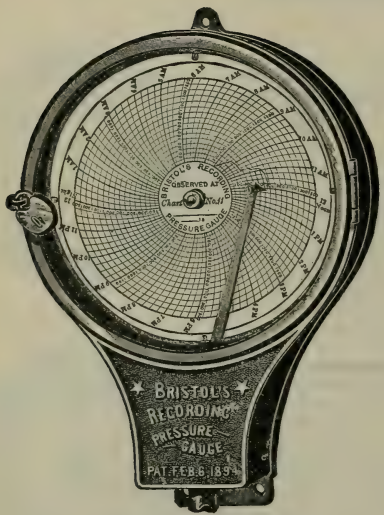
5-INCH DIAL EACH	20.00



E-55.

FARM OR TRACTION ENGINE GAUGES.—E-55.

STYLE OF CASE	Iron, with Brass Ring.	Iron, with N. P. Ring.
5½-INCH DIAL EACH	10.00	10.25
5 -INCH DIAL EACH	8.00	8.20
4½-INCH DIAL EACH	8.00	8.20
3½-INCH DIAL EACH	7.00	7.18



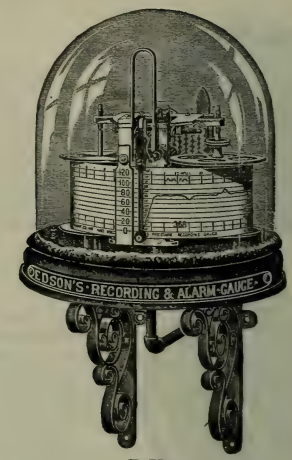
E-56.
BRISTOL'S RECORDING PRESSURE AND VACUUM GAUGE.

NICKEL PLATED CASE, WITH 100 8-INCH CHARTS AND BOTTLE OF RECORDING INK		50.00
IF WITH ALUMINUM CASE	ADD	10.00
ELECTRIC ALARM ATTACHMENT	EXTRA	10.00
SPECIAL CHART, GRADUATED TO ORDER	EXTRA	15.00
ADDITIONAL CHARTS	PER HUNDRED	.75

SPECIAL RECORDING INK IN BOTTLES,

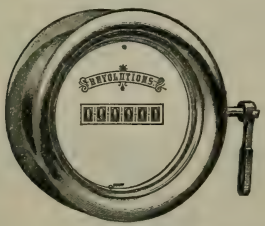
1 Ounce.	4 Ounce.	Half Pint.	1 Pint.	1 Quart.
.25	.60	1.00	2.00	4.00

In ordering Gauges, state Maximum Working or Vacuum.



E-57.
EDSON'S RECORDING AND ALARM GAUGE. STYLE NO. 2. FOR RECORDING STEAM, WATER, GAS, NATURAL GAS, AIR, OIL, BLAST-FURNACE, AND PIPE-LINE PRESSURE.

STYLE NO.	1	2
EACH	85.00	80.00



E-59.
REVOLUTION COUNTER, IN BRASS CASES.

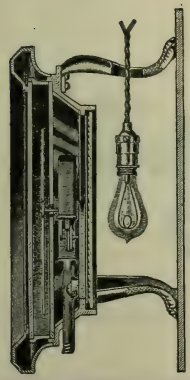
SIZE OF DIAL IN.	6	6¾	8½	10	12
8-WHEEL EACH	-----	-----	80.00	95.00	110.00
6-WHEEL EACH	50.00	60.00	70.00	85.00	100.00



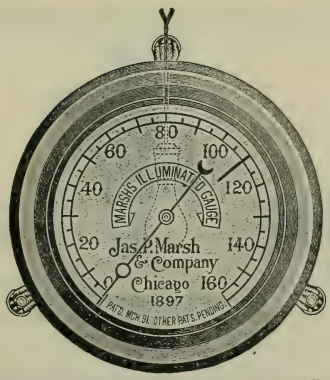
E-61.
REVOLUTION COUNTERS, IN SQUARE METAL CASES.

SIZE INCHES	7x2½	8x2½	9x2½	10x2½
NUMBER OF FIGURES	4	5	6	7
COUNTING	10,000	100,000	1,000,000	10,000,000
PRICE EACH	20.00	24.00	28.00	32.00
SIZE INCHES	4½x1¾	5x1¾	5½x1¼	6x1¾
NUMBER OF FIGURES	4	5	6	7
COUNTING	10,000	100,000	1,000,000	10,000,000
PRICE EACH	13.50	16.00	20.00	24.00

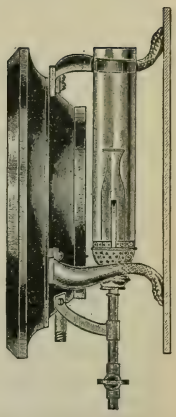
Extra Re-Setting Attachment, each, 4.00.



E-62. SECTIONAL VIEW.



E-62. ILLUMINATED TRIPOD GAUGE.



E-63. SIDE VIEW.

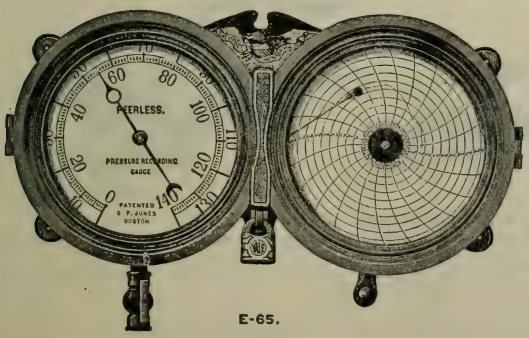
ILLUMINATED TRIPOD STEAM GAUGES.—E-62 and E-63.

SIZE DIAL . . . . . INCHES	12	10	8½	6¾	6	5½
BRASS CASE . . . . . EACH	75.00	40.00	30.00	20.00	16.00	12.00
IRON CASE . . . . . EACH	50.00	32.00	22.00	16.00	13.00	10.00

A gauge with an illuminated dial will be appreciated, especially in dark engine and boiler rooms. The Marsh Illuminated Gauge is constructed so that an electric, gas or oil lamp can be used, according to conditions or circumstances in engine or boiler room. We make illuminated gauges for all purposes. In most engine and boiler rooms artificial light is used in front of gauges to enable the engineer to see the pressure indicated on gauge, which is unsatisfactory. This can be avoided by using the Marsh Illuminated Gauge, which reflects the light through the dial from back of gauge and throws a steady, soft and satisfactory light. It also helps to light the engine or boiler room. Where electric lights are not available, the Welsbach gas light is superior to the ordinary gas burner or oil lamp. (We recommend this style of burner.)

The sectional view cuts show how the light should be arranged in connection with the gauge. The light is diffused over the dial by passing through a prismatic lens. The dial of this gauge is superior to all other dials commonly used when illumination is unnecessary. It is not injured by excessive heat, owing to its perfect insulation.

PEERLESS PRESSURE-INDICATING AND RECORDING GAUGES.—E-65.



E-65.

THE STANDARD RECORDING GAUGES OF THE WORLD.

FOR ACCURACY, DURABILITY AND ELEGANCE, UNRIVALED.

EVERY GAUGE GUARANTEED TO BE SATISFACTORY.

It makes a perfect chart, showing the extent, duration, and time of every variation of pressure of steam, water, air or gas.

Each instrument is mounted on an ornamental board. Locks with Yale lock, runs eight days, has union cock, one year's supply of recording dials, filler and ink.

The tracing is done by stylographic pen, requiring filling with ink but once a month.

Everything complete with this Gauge ready for the piping.

PRICE, INCLUDING ONE YEAR'S SUPPLY OF DIALS	100.00

ENGINE AND BOILER TRIMMINGS.


E-68.


E-69.


E-70.


E-71.


E-72.

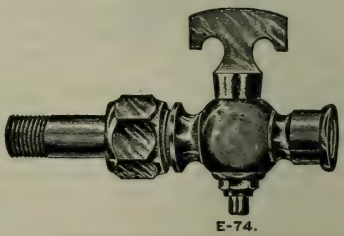
STEAM GAUGE SIPHONS.

FIGURE	E-68	E-69	E-70	E-71	E-72
EACH	1.00	1.25	1.50	1.50	.50


E-73.

STEAM GAUGE COCK.

SIZE, ¼-INCH	EACH	.75

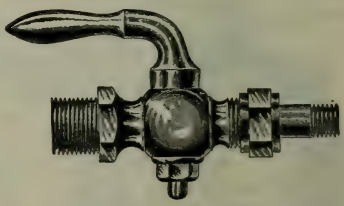

E-74.

STEAM GAUGE COCK, WITH UNION.

SIZE, ¼-INCH	EACH	1.75


E-80.


E-81.


E-82. WITH UNION.

CYLINDER COCKS.

SIZE, INCHES	¼	⅜	½	¾
E-80, EACH	1.15	1.30	1.85	2.60
E-81, EACH	1.25	1.50	2.00	2.70
E-82, EACH	----	2.00	2.50	3.75

ENGINE AND BOILER TRIMMINGS.


E-86.


E-88.


E-90.

AIR COCKS.

SIZE — INCHES	1/8	1/4	3/8	1/2
E-86 — EACH	.40	.40	.50	.60
E-88 — EACH	.55	.55	.65	.75
E-90 — EACH	.55	.55	.65	.90


E-92.


E-94.


E-96.

SIZE — INCHES	1/8	1/4	3/8	1/2
E-92 — EACH	.60	.70	.85	1.00
E-94 — EACH	.70	.70	.90	----
E-96 — EACH	.80	.80	.95	----


E-98.

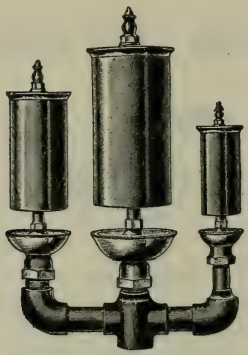

E-100.


E-102.

SIZE — INCHES	1/8	1/4	3/8	1/2
E-98 — EACH	.70	.70	.80	.90
E-100 — EACH	.80	.80	.90	1.00
E-102 — EACH	.95	1.15	1.25	1.50



E-110. WITH ADJUSTABLE LEVER.



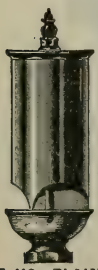
E-112.



E-114. PLAIN.

WHISTLES.—E-110 and E-114.

DIAMETER OF BELL INCHES	1	1¼	1½	2	2½	3	3½	4	5	6	8	10
SIZE PIPE . . . . . INCHES	½	½	½	¾	¾	1	1	1¼	1½	2	2½	2½
WITH VALVE . . . . . EACH	3.10	3.75	4.00	5.50	6.50	8.50	11.50	15 00	22.50	33.00	95.00	210.00
PLAIN . . . . . EACH	2.20	2.75	3.00	4.35	5.25	7.25	9.50	12.00	19.00	24.00	70.00	150.00



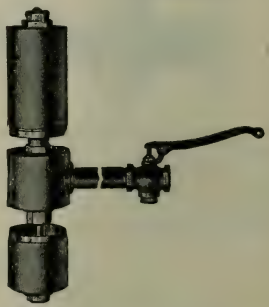
E-116. PLAIN.



E-117.



E-118.



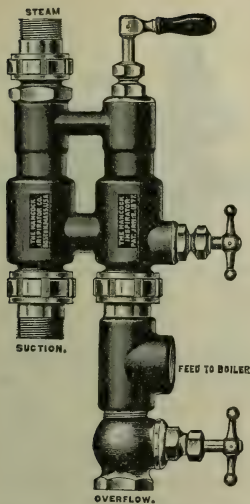
E-121.

DIAMETER OF BELL . . . . . INCHES	2	3	4	5	6	8	10	12
SIZE OF PIPE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
E-116. PLAIN . . . . . EACH	5 00	8 00	14.00	28.00	38.00	85.00	150.00	260.00
E-117. WITH VALVE . . . . . EACH	7 00	11.00	18.00	35.00	45.00	100 00	180.00	300.00

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3
E-118. WHISTLE VALVES . . . . . EACH	2.50	3.00	3.50	5.00	6 00	9.00	18.00	27.00

DIAMETER OF BELL . . . . . INCHES	4	5	8	10
SIZE OF PIPE . . . . . INCHES	1½	1½	2	2½
E-121. GONG WHISTLE. PRICE, WITHOUT VALVE . . . . . EACH	12.00	14.00	20.00	30.00

Made of Iron. It makes an entirely different sound from any ordinary whistle, and can be heard from six to eight miles.



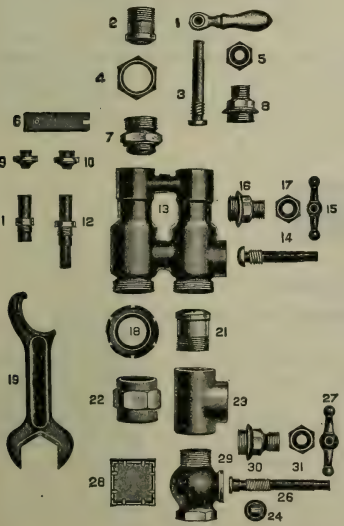
E-124. HANCOCK INSPIRATOR.

THE HANCOCK INSPIRATOR, "STATIONARY" PATTERN.—E-124.

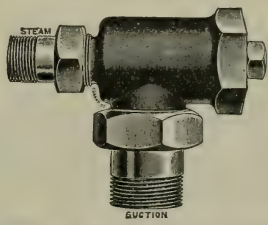
Sizes.	Prices "Stationary" Type.	Pipe Connections. Steam.	Suction and Delivery.	Overflow.	Capacity per Hour with 60 lbs. Steam Pressure.	Horse Power. For the Ordinary Type of Boiler and Engine.	On a Basis of 30 lbs. Evaporation per H. P. per Hour.
7½	16.00	⅜	⅜	¼	60 gals.	4 to 6	5 to 8
8¾	18.00	⅜	½	⅜	90 gals.	6 to 8	8 to 15
10	20.00	⅜	½	⅜	120 gals.	8 to 15	15 to 25
12½	25.00	½	¾	½	220 gals.	15 to 30	25 to 35
15	30.00	½	¾	½	300 gals.	30 to 40	35 to 60
17½	40.00	¾	1	¾	420 gals.	40 to 60	60 to 75
20	45.00	¾	1	¾	540 gals.	60 to 75	75 to 100
22½	55.00	1	1¼	1	720 gals.	75 to 90	100 to 130
25	60.00	1	1¼	1	900 gals.	90 to 120	130 to 175
30	75.00	1¼	1½	1¼	1260 gals.	120 to 165	175 to 235
35	90.00	1¼	1½	1¼	1740 gals.	165 to 230	235 to 300
40	110.00	1½	2	1½	2230 gals.	230 to 300	300 to 400
45	125.00	1½	2	1½	2820 gals.	300 to 375	400 to 500
50	150.00	2	2½	2	3480 gals.	375 to 500	500 to 650
55	175.00	2	2½	2	3650 gals.	500 to 600	650 to 700

Will lift water 25 feet or take it under a head. Will deliver the water at either high or low temperature, as desired. No adjustment of either steam or water supply for varying steam pressures.

REPAIR PARTS FOR "STATIONARY" PATTERN INSPIRATORS.



E-125.



E-126. HANCOCK EJECTOR OR JET PUMP.

HANCOCK EJECTORS OR JET PUMPS.—E-126.

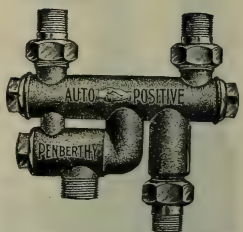
NUMBER	1	2	3	4	5	6
CAPACITY PER HOUR . . . GALLONS	244	550	977	1525	2200	3900
SIZE STEAM CONNECTION . . INCHES	¼	⅜	½	¾	¾	1
SIZE SUCTION AND DELIVERY . INCHES	½	¾	1	1½	1½	2
EACH	8.00	10.00	15.00	20.00	25.00	35.00
NUMBER	7	8	9	10	11	....
CAPACITY PER HOUR . . GALLONS	6000	8800	15600	24300	35000	....
SIZE STEAM CONNECTION . . INCHES	1¼	1½	2	2½	2½	....
SIZE SUCTION AND DELIVERY . INCHES	2½	3	4	5	6	....
EACH	45.00	55.00	70.00	110.00	160.00	....

Sizes 1, 2, 3 and 4 are made entirely of brass. Sizes 5, 6 and 7 have iron bodies and brass unions for steam and suction. Sizes 8, 9, 10 and 11 have iron bodies with brass unions for steam only.



E-129. AUTOMATIC INJECTOR.

TRADE PENBERTHY MARK.



E-131. AUTO-POSITIVE INJECTOR.

PENBERTHY AUTOMATIC INJECTOR.—E-129.

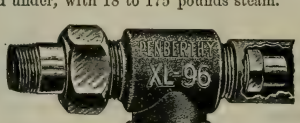
SIZE	00	A	AA	B	BB	C	CC	D	DD	E
PRICE EACH	16.00	18.00	20.00	25.00	30.00	40.00	45.00	55.00	60.00	75.00
HORSE-POWER	4 to 8	8 to 16	12 to 22	17 to 32	20 to 45	40 to 65	45 to 80	50 to 100	75 to 135	100 to 180
PIPE CONNECTIONS INCHES	⅜	½	½	¾	¾	1	1	1¼	1¼	1½
GALLONS PER HOUR, 1 TO 3 FT. LIFT MAX.	80	135	180	260	355	475	600	800	1,000	1,400
GALLONS PER HOUR, 1 TO 3 FT. LIFT MIN.	55	70	100	140	170	300	350	425	525	800

Working Range: Start low, 18 to 22 pounds steam on 4 foot lift. Work high, 150 to 160 pounds steam on 4 foot lift. Lift water 20 to 21 feet on 60 to 80 pounds steam. Handle hot water 120° to 125° at 60 to 80 pounds steam. 112° to 115° at 100 pounds steam. 95° to 100° at 125 pounds steam.

PENBERTHY AUTO-POSITIVE INJECTOR.—E-131.

SIZE	112	113	115	117	119	121	123
PRICE EACH	18.00	20.00	30.00	45.00	60.00	90.00	125.00
PIPE CON.—STEAM, SUCTION, DELIVERY	⅜	½	¾	1	1¼	1½	2
CAPACITY, GAL. PER HOUR, 60 TO 80 LBS. STEAM, 3 FT. LIFT MAX.	120	200	400	675	1125	2000	3000
CAPACITY, GAL. PER HOUR, 60 TO 80 LBS. STEAM, 3 FT. LIFT MIN.	40	60	130	225	375	700	1000
HORSE-POWER, ALLOWING 8 GALLONS PER HORSE-POWER PER HOUR	5 to 15	7 to 25	16 to 50	28 to 85	47 to 145	87 to 265	125 to 400

Working Range: Start low, 15 to 18 pounds steam on 3 foot lift. Work high, 225 to 235 pounds steam on 3 foot lift. Lift water 20 to 22 feet on 60 to 100 pounds steam. Handle hot water when flowing to Injector as follows: 143° to 145° and under, with 75 to 100 pounds steam. 133° to 135° and under, with 50 to 120 pounds steam. 118° to 120° and under, with 25 to 150 pounds steam. 98° to 100° and under, with 18 to 175 pounds steam.



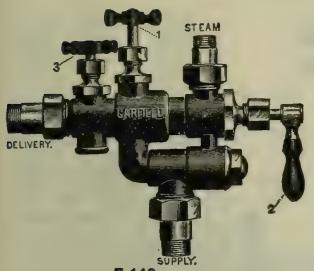
*E-133. XL-96 EJECTOR OR JET PUMP.

LIFTS 20 FEET ON 25 POUNDS STEAM. ELEVATES 50 TO 75 FEET.

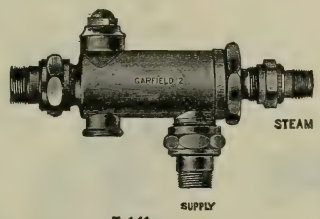
NUMBER	1	2	3	4	5	6	7	8	9	10
PIPE CONNECTION STEAM	⅜	½	¾	1	1	1¼	1½	2	2	2½
PIPE CONNECTION SUCTION AND DELIVERY	½	¾	1	1¼	1½	2	2½	3	3½	4
CAPACITY PER HOUR 40 TO 65 LBS. STEAM, 3 FT. LIFT GAL.	240	500	840	1350	1950	3500	5700	9500	13600	18400
CAPACITY PER HOUR 20 TO 40 LBS., OR 65 TO 100 LBS. GAL.	235	450	700	1300	1850	3000	4350	8160	12400	17100
CAPACITY PER HOUR 50 FT. ELEVATION, 40 TO 65 LBS., GAL.	120	250	420	650	975	1750	2500	4750	6800	9200
CAPACITY PER HOUR 25 FT. ELEVATION, 40 TO 65 LBS., GAL.	180	375	625	950	1450	2600	3750	7200	10200	13800
VERTICAL LIFT 25 TO 40 LBS., OR 75 TO 100 LBS., FEET	20	22	22	21½	21½	21½	22	20	21	21
VERTICAL LIFT 40 TO 75 LBS. FEET	23	25	25	24	26	26	26	25	25	25
PRICE, ALL BRASS EACH	8.00	10.00	15.00	20.00	25.00	35.00	50.00	70.00	105.00	145.00

*Unless ordered in brass sizes 7 to 9 will be shipped with iron body, brass jets and steam connection, and size 10 all iron except jets.

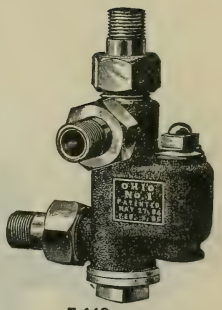
ENGINE AND BOILER TRIMMINGS.



E-140.
GARFIELD DOUBLE JET INJECTOR.



E-141.
GARFIELD AUTOMATIC INJECTOR.



E-142.
OHIO AUTOMATIC INJECTOR.

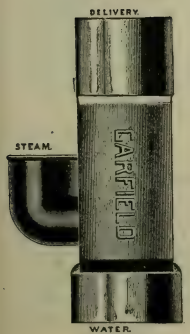
GARFIELD DOUBLE JET AND AUTOMATIC INJECTORS.—E-140 and E-141.

NUMBER	00	0	1	2	3	4	5	6
EACH	16.00	18.00	20.00	25.00	30.00	40.00	45.00	55.00
SIZE OF CONNECTIONS — STEAM	⅜	⅜	⅜	½	½	¾	¾	1
SIZE OF CONNECTIONS — SUPPLY AND DELIVERY	⅜	½	½	¾	¾	1	1	1¼
GAL. PER HOUR, 80 LBS. STEAM PRESS.	60	90	120	220	300	420	540	720
HORSE-POWER, 80 LBS. STEAM PRESSURE	2 to 5	5 to 10	10 to 15	15 to 24	24 to 35	35 to 50	50 to 65	65 to 90

NUMBER	7	8	9	10	11	12	13	14
EACH	60.00	75.00	90.00	110.00	125.00	150.00	180.00	200.00
SIZE OF CONNECTIONS — STEAM	1	1¼	1¼	1½	1½	2	2	2
SIZE OF CONNECTIONS — SUPPLY AND DELIVERY	1¼	1½	1½	2	2	2½	2½	2½
GAL. PER HOUR, 80 LBS. STEAM PRESS.	900	1200	1700	2200	2800	3400	4000	4500
HORSE-POWER, 80 LBS. STEAM PRESSURE	90 to 115	115 to 150	150 to 200	200 to 275	275 to 350	350 to 425	425 to 500	500 to 600

THE OHIO AUTOMATIC INJECTOR.—E-142.

SIZE	0	1	2	3
EACH	18.00	20.00	25.00	30.00
CAPACITY PER HOUR, GALLONS	120	165	250	340
HORSE-POWER	8 to 10	10 to 15	15 to 25	25 to 35
PIPE CONNECTIONS	½	½	¾	¾



E-144 GARFIELD EJECTOR.

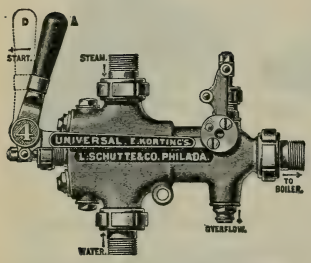
The capacities given above for Garfield and Ohio Automatic Injectors are obtained by actual measurements, on the following basis:

Steam 80 lbs.; lift 4 feet and feed water at 76 degrees Fahr. The actual capacities are in excess of the list and fully equal to any make of same size, connections and price.

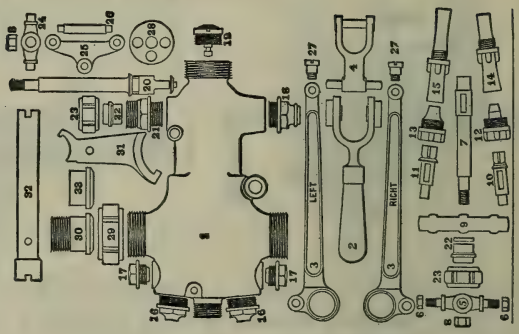
THE GARFIELD EJECTOR.—E-144.

NUMBER	1	2	3	4	5	6	7
EACH	8.00	10.00	15.00	20.00	25.00	35.00	50.00
STEAM CONNECTION	⅜	⅜	½	¾	1	1¼	1½
SUCTION CONNECTION	¾	1	1¼	1½	2	2½	3
DELIVERY CONNECTION	½	¾	1	1¼	1½	2	2½
CAPACITY GALLONS PER HOUR	300	500	800	1300	2000	3000	5000

The above capacities are secured from actual tests made on 6 foot lift and 20 foot elevation with 60 pounds of steam. For a greater lift or elevation the capacity is decreased in same proportion as with other Ejectors.



E-146. KORTING INJECTOR.



PARTS OF THE KORTING INJECTOR.

KORTING INJECTOR.—E-146.

NUMBER.	PRICE.	SIZE OF IRON PIPE.	STEAM, 50 POUNDS.		STEAM, 100 POUNDS.		STEAM, 150 POUNDS.		SIZE OF COPPER PIPE, O. D.
			GALLONS.	HORSE POWER.	GALLONS.	HORSE POWER.	GALLONS.	HORSE POWER.	
00	20.00	$\frac{1}{8}$	33	7	48	10	60	12	$\frac{1}{4}$
0	21.00	$\frac{1}{4}$	83	17	101	20	112	22	$\frac{5}{16}$
1	23.00	$\frac{3}{8}$	112	23	143	30	180	36	$\frac{1}{2}$
2	28.00	$\frac{1}{2}$	172	35	210	40	232	46	$\frac{5}{8}$
3	38.00	$\frac{3}{4}$	278	56	338	70	397	80	$\frac{5}{8}$
$3\frac{1}{2}$	38.00	$\frac{3}{4}$	398	80	472	95	547	110	$\frac{5}{8}$
4	50.00	1	533	108	622	125	720	150	$1\frac{1}{8}$
5	60.00	$1\frac{1}{4}$	675	136	802	160	922	190	$1\frac{1}{2}$
6	60.00	$1\frac{1}{4}$	825	165	990	200	1,125	230	$1\frac{1}{2}$
7	85.00	$1\frac{1}{2}$	1,072	215	1,372	280	1,612	320	$1\frac{3}{4}$
8	85.00	$1\frac{1}{2}$	1,388	280	1,800	360	2,115	430	$1\frac{3}{4}$
9	120.00	2	1,688	340	2,100	420	2,475	500	$2\frac{1}{4}$
10	120.00	2	2,025	400	2,438	500	2,850	570	$2\frac{1}{4}$
12	165.00	$2\frac{1}{2}$	3,000	600	3,638	750	4,252	850	$2\frac{3}{4}$
14	250.00	3	3,867	780	4,635	930	5,500	1,100	$3\frac{1}{4}$
16	250.00	3	5,025	1,000	6,075	1,200	7,000	1,400	$3\frac{1}{4}$
20	450.00	4	9,000	1,800	10,840	2,200	12,525	2,500	$4\frac{1}{4}$

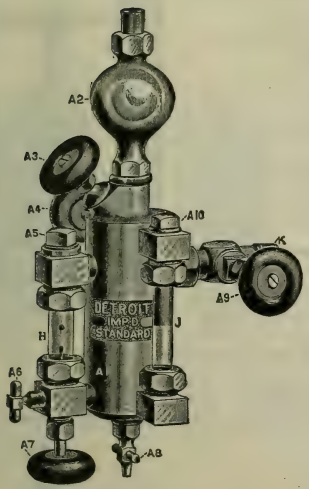


E-148.

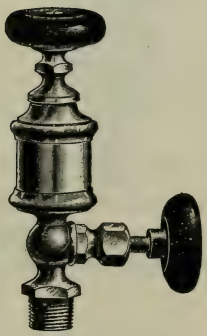
BLAKESLEE JET PUMPS.—E-148.

SIZE OF PUMP . . . . . INCHES	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
SIZE OF SUCTION PIPE . . . . . INCHES	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
SIZE OF DISCHARGE PIPE . . . . INCHES	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$
SIZE OF STEAM PIPE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	1	1
CAPACITY PER MINUTE . . . . GALLONS	8	15	20	30	40	50	60
PRICE WITH BRASS FITTINGS . . EACH	8.00	10.00	12.00	14.00	16.00	20.00	24.00

Brass Pumps can be furnished at additional cost.



E-150.
DETROIT IMPROVED LUBRICATOR.



E-154. PLAIN LUBRICATOR.



E-156.
PLAIN LUBRICATOR
WITH DRAIN STEM.

DETROIT IMPROVED SIGHT-FEED LUBRICATORS.—E-150.

CAPACITY	⅛ Pint.	½ Pint.	1 Pint.	1 Quart.	½ Gallon.	1 Gallon.
SIZE FOR CYLINDER	Under 10-inch	10 to 12-inch	12 to 18-inch	18 to 30-inch	30-inch and over	--------
POLISHED BRASS . . EACH	17.00	22.00	30.00	45.00	60.00	75.00
NICKEL PLATED . . EACH	20.00	25.00	35.00	50.00	65.00	80.00

WOOD WHEEL LUBRICATORS.—E-154 and E-156.

DIAMETER OF BODY . . . . INCHES	1	1¼	1½	1¾	2	2¼	2½	3
PIPE THREAD	⅜	⅜	½	½	½	¾	¾	¾
E-154 . . . . . EACH	2.00	2.20	2.40	2.60	2.90	3.25	3.75	4.75
E-156 . . . . . EACH	3.00	3.20	3.40	3.60	3.90	4.25	4.75	5.75



E-158. JET PUMP

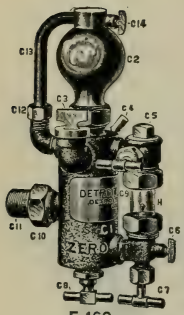
JET PUMPS.—E-158.

SIZE . . . . . INCHES	¾	1	1¼	1½	2
BRASS JETS . . . . . EACH	4.00	5.00	6.00	7.50	----
IRON BRASS MOUNTED JETS . . EACH	----	----	----	----	9.00
SUCTION PIPE . . . . . INCHES	¾	1	1¼	1½	2
DISCHARGE PIPE . . . . . INCHES	¾	1	1¼	1½	2
STEAM PIPE . . . . . INCHES	⅜	½	½	¾	¾
CAPACITY . . . . . GALLONS PER MINUTE	8 to 10	12 to 15	15 to 20	25 to 30	30 to 40

ZERO (COLD WEATHER) LUBRICATORS.

SINGLE AND DOUBLE CONNECTION.

FOR TRACTION, STATIONARY, HOISTING, PORTABLE ENGINES AND STEAM PUMPS.



E-162.
SINGLE CONNECTION.

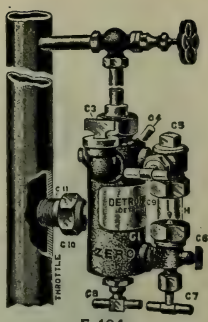
We make two styles of Double Connection Zero Lubricators—Style "A" and Style "C."

The Style "A" Double Connection Zero should be attached with both connections on same side of throttle, either above or below, as circumstances will permit.

The Style "C" Double Connection Zero has spray feed feature, and should take steam above the throttle and deliver the oil below the throttle, either into steam pipe or top of steam chest.

In ordering Double Connection Zero Lubricators, please say whether Style "A" or Style "C" is wanted.

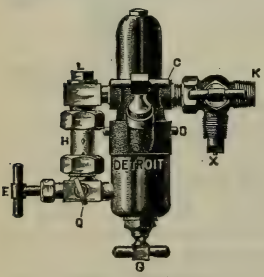
The Single Connection Zero Lubricator may be attached to the steam pipe on either side of the throttle or to the steam chest direct.



E-164.
DOUBLE CONNECTION.

DETROIT ZERO LUBRICATORS.—E-162 and E-164.

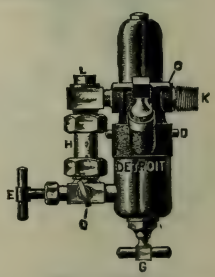
CAPACITY	¼ Pint	⅓ Pint	½ Pint	1 Pint	1 Quart
BRONZE BODY, FINISHED TRIMMINGS . . . . . EACH	15.00	17.00	20.00	28.00	42.00
NICKEL PLATED ALL OVER . . . . . EACH	18.00	20.00	23.00	32.00	47.00



E-166. STYLE D.
WITH REVERSIBLE VALVE.

½-PINT SINGLE CONNECTION LUBRICATORS.

FOR SMALL ENGINES AND STEAM PUMPS.



E-168. STYLE E.
WITHOUT REVERSIBLE VALVE.

DETROIT ½-PINT SINGLE CONNECTION LUBRICATORS.—E-166 and E-168.

BRASS . . . . . EACH	12.00	NICKEL PLATED . . . . . EACH	14.00



E-170.

DETROIT LUBRICATORS.—E-170.

FOR GAS AND GASOLINE ENGINES, AIR COMPRESSORS AND AMMONIA CYLINDERS.

CAPACITY	¼ Pint	⅓ Pint	½ Pint	1 Pint	1 Quart
BRASS BODY, FINISHED . . . . . EACH	15.00	17.00	20.00	28.00	42.00
NICKEL PLATED ALL OVER . . . . . EACH	18.00	20.00	23.00	32.00	47.00

In ordering, state if wanted for gas, air, or ammonia.



E-190.



E-192. SIGHT FEED.



E-194. SIGHT AND STOP FEED.



E-196. JOURNAL OIL CUP.

BRASS, GLASS BODY OIL CUPS.

WITH SLIDE TOP AND LOCKNUT.

DIAMETER	INCHES	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$
HEIGHT	INCHES	1	$1\frac{1}{8}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$
CAPACITY	OUNCES	$\frac{1}{2}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	4
PIPE THREAD	INCHES	$\frac{1}{8}$	$\frac{1}{8}$*$\frac{1}{4}$	$\frac{1}{4}$*$\frac{3}{8}$	$\frac{1}{4}$*$\frac{3}{8}$	$\frac{3}{8}$*$\frac{1}{2}$	$\frac{3}{8}$*$\frac{1}{2}$	$\frac{3}{8}$
E-190	EACH	1.30	1.50	1.70	1.90	2.10	2.45	3.25
E-192, WITH SIGHT FEED	EACH	2.30	2.50	2.80	3.00	3.25	3.70	4.50
E-194, WITH SIGHT AND STOP FEED	EACH	3.00	3.25	3.50	3.75	4.00	4.45	5.25
E-196, SKELETON, JOURNAL OIL CUP	EACH	1.50	1.65	2.00	2.50	3.00	3.75	4.75
EXTRA GLASSES, INCLUDING CORK WASHERS	EACH	.10	.10	.12	.14	.15	.20	.30

Nickel Plated, add 50 cents each to above list.
*Size pipe thread, E-196.
E-196 Skeleton Oiler can be furnished with locknut for Crank Pins.



E-200. PLAIN.



E-202. HINGED LID.



E-204. ELBOW SHANK.



E-206. LEVER HANDLE.

BRASS OIL CUPS.

DIAMETER OF BODY, INCHES / PIPE THREAD . . INCHES		$\frac{5}{8}$ / $\frac{1}{8}$	$\frac{3}{4}$ / $\frac{1}{8}$	$\frac{7}{8}$ / $\frac{1}{8}$	1 / $\frac{1}{4}$	$1\frac{1}{8}$ / $\frac{1}{4}$	$1\frac{1}{4}$ / $\frac{1}{4}$	$1\frac{1}{2}$ / $\frac{3}{8}$	$1\frac{3}{4}$ / $\frac{3}{8}$	$1\frac{3}{4}$ / $\frac{1}{2}$	$1\frac{7}{8}$ / $\frac{1}{2}$	2 / $\frac{3}{8}$	2 / $\frac{1}{2}$	$2\frac{1}{4}$ / $\frac{1}{2}$	$2\frac{1}{2}$ / $\frac{1}{2}$	$2\frac{1}{2}$ / $\frac{3}{4}$	3 / $\frac{3}{4}$
E-200	EACH	.25	.30	.35	40	.50	.60	90	1.25	1.25	1.60	1.75	1 75	2.25	2.75	2 75	4.50
E-202	EACH	----	----	----	1.00	----	1.40	1.85	----	----	----	3.10	----	----	----	----	----
E-204	EACH	----	----	----	.70	----	1.00	1 40	----	----	----	2.30	----	----	----	----	----
E-206	EACH	----	----	----	1.10	1.35	1.60	2.20	----	----	----	----	3.25	4.00	----	----	----



E-216.
PIONEER SLIDE TOP.



E-218.
ROYAL SIGHT-FEED.



E-220. SENTINEL.
LEVER UP, CUP FEEDING.

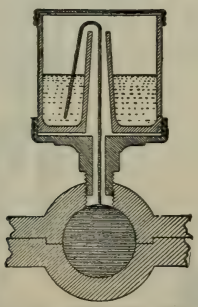


E-220. SENTINEL.
LEVER DOWN, FEED STOPPED.

PIONEER AND ROYAL GLASS OIL CUPS—E-216 and E-218.

NUMBER	000	00	0	1	1½	2	3	4	5	6
OUTSIDE DIAMETER OF GLASS . . . . . INCHES	1	1⅛	1¼	1½	1¾	2	2¼	2½	3	3½
CAPACITY . . . . . OUNCES	½	½	⅝	1	1½	2½	4	5	10	18
SHANK PIPE THREAD . . . . . INCH	⅛	⅛	⅛	¼	¼	⅜	⅜	⅜	½	½
PIONEER. FINISHED BRASS. . . . . EACH	.70	.75	.80	1 00	1 25	1.50	1.90	2.40	3.10	4.00
ROYAL. FINISHED BRASS . . . . . EACH	.95	1.10	1.25	1 50	1.75	2.10	2.55	3.15	3.90	4.80
SENTINEL. FINISHED BRASS . . . . . EACH	------	------	3.00	3.25	3 50	3.75	4.25	5.25	7.25	9.25

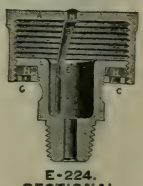
To avoid mistakes when ordering Glasses and Cork Washers, specify name and number of cup, as stamped on same.



E-221. FINCH OIL CUP.



E-224.
TIGER PLAIN BRASS
GREASE CUP.



E-224.
SECTIONAL.

FINCH OIL CUPS.—E-221.

NUMBER	1	2
CAPACITY . . . . . OUNCES	⅝	1 1/16
PIPE THREAD . . . . . INCHES	¼	¼
PRICE . . . . . PER DOZ.	9 00	10 00

TIGER PLAIN BRASS GREASE CUPS.—E-224.

NUMBER	00	0	1	2	3	4
SHANK PIPE THREAD . INCH	⅛	¼	¼	⅜	½	½
CAPACITY (GREASE) . OUNCES	½	⅔	1	2	3½	5
FINISHED BRASS . . . EACH	70	.90	1.15	1.50	2.15	2.90
ROUGH BRASS . . . . EACH	.56	74	.96	1.28	1 76	2 30

E-221. For all classes of stationary bearings. Positively automatic. Feed starts when machinery starts. Feed stops when machinery stops. Obviates all danger of hot bearings. Write for circular giving details.



E-225. OIL PUMP, HORIZONTAL SHANK.

BRASS BODY OIL PUMPS.



E-226. OIL PUMP, VERTICAL SHANK.

CAPACITY . . . . . PINTS	¼	½	1	2
SIZE OF PIPE THREADS . . . . . INCHES	⅜	½	½	½
POLISHED BRASS . . . . . EACH	4.25	5 00	7.50	12.00
NICKEL PLATED . . . . . EACH	4.75	5.75	8.60	13.50

In ordering, state whether vertical or horizontal connection is wanted.
Smaller shanks than as given above can be furnished without extra charge, but for larger ones an extra charge will be made.



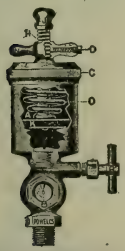
E-227. OILER, PLAIN.

GAS ENGINE CYLINDER OILERS.—E-227 and E-228.

NUMBER	1	1½	2	3	4	5	6	7	8
DIAMETER OF GLASS . . . INCHES	1½	1¾	2	2½	2½	3	3½	4	4½
CAPACITY . . . . . OUNCES	1	1½	2½	4	6	8	16	1½ Pt.	1 Qt.
IRON PIPE CONNECTION . INCHES	¼	⅜	⅜	⅜	½	½	½	¾	¾
E-227. FINISHED . . . . . EACH	2.50	2.65	2 80	3.50	4.00	5.40	7.00	12.00	15.00
E-227. NICKEL PLATED . . . EACH	2.90	3.10	3.25	4 00	4 60	6.25	8.20	13.50	17.00
E-228. FINISHED . . . . . EACH	4.50	4.65	4.80	5.50	6.00	7.40	9.00	-----	-----
E-228. NICKEL PLATED . . . EACH	4.90	5.10	5.25	6.00	6.60	8.25	10.20	-----	-----



E-228. OILER, WITH LEVER CUT-OFF.

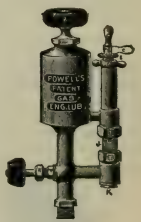


E-229. PRESSURE LUBRICATOR.

SIGHT PRESSURE FEED LUBRICATORS.—E-229.

FOR FEEDING HEAVY OIL TO CYLINDERS OF GAS, GASOLINE AND NAPHTHA ENGINES, AIR COMPRESSORS, ETC.

NUMBER	1	2	3	4
DIAMETER OF CUP INSIDE . . . INCHES	1½	2	2½	3
CAPACITY . . . . . OUNCES	1½	3	6	10
SIZE OF IRON PIPE THREAD . . INCHES	¼	⅜	½	½
FINISHED . . . . . EACH	5.00	6.00	8.00	10.00
NICKEL PLATED . . . . . EACH	6.00	7.25	9.50	12.00



E-230. CYLINDER LUBRICATOR.

GAS ENGINE CYLINDER LUBRICATORS.—E-230.

NUMBER	0	1	2	3	4	5	6
DIAMETER OF BODY . . . . . INCHES	1½	1¾	2	2¼	2½	3	3½
CAPACITY . . . . . OUNCES	1	1½	2½	4	5	10	18
SIZE IRON PIPE THREAD . . . . . INCHES	⅜	⅜	½	½	½	½	¾
PRICE, FINISHED . . . . . EACH	3.50	4.00	5.00	6.00	8.00	10.00	12.00
PRICE, NICKEL PLATED . . . . . EACH	4.20	5.00	6.00	7.25	9.50	12.00	14.00



E-231. SIGHT FEED.



E-233. SIGHT FEED.



E-236. SIGHT FEED.



E-238. ADJUSTABLE FEED.

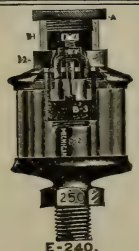
LONERGAN GLASS ENGINE OILERS.

E-231 NUMBER	125	125½	126	126½	127	127¼	127½
OUTSIDE DIAMETER OF GLASS, LARGE END INCHES	1 1/16	2 1/8	2 1/2	2 7/8	3 1/4	3 1/2	3 1/2
HEIGHT OF GLASS INCHES	1 3/4	2 1/16	2 3/16	2 3/4	3 1/2	3 5/16	4
CAPACITY (APPROXIMATE) OUNCES	1	2	3	5	8	12	16
PIPE THREAD INCH	1/4	3/8	3/8	3/8	1/2	1/2	1/2
BRASS FINISH EACH	2.00	2.25	3.00	3.75	4.50	5.50	6.50
NICKEL PLATED EACH	2.25	2.75	3.25	4.10	4.85	5.95	7.00

E-233 NUMBER	253	254	255	256	257	258	259	260	261	262	263
OUTSIDE DIAMETER OF GLASS INCHES	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3	3 1/2	3 1/2	4
HEIGHT OF GLASS INCHES	1 5/8	1 1/2	1 3/4	2 1/2	2 3/8	2 1/2	2 3/4	3	3 1/2	4	4 3/4
CAPACITY OUNCES	3/4	1	2	3	4	6	7	8	12	16	32
PIPE THREAD INCH	1/4	1/4	3/8	3/8	3/8	1/2	1/2	1/2	1/2	1/2	1/2
BRASS FINISH EACH	1.50	1.75	2.00	2.50	3.25	4.00	5.00	5.50	6.50	7.00	9.00
NICKEL PLATED EACH	1.75	2.00	2.25	2.80	3.55	4.35	5.40	6.00	7.00	7.50	10.00

E-236, SIGNAL NUMBER	383	384	385	386	387	388	389	390	391	392	393
OUTSIDE DIAMETER OF GLASS INCHES	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3	3 1/2	3 1/2	4
HEIGHT OF GLASS INCHES	1 5/8	2 1/2	1 3/4	2 5/8	2 3/8	2 1/2	2 3/4	3	3 1/2	4	4 3/4
CAPACITY OUNCES	3/4	1	2	3	4	6	7	8	12	16	32
PIPE THREAD INCH	1/4	1/4	3/8	3/8	3/8	1/2	1/2	1/2	1/2	1/2	1/2
BRASS FINISH EACH	1.50	1.75	2.00	2.50	3.25	4.00	5.00	5.50	6.50	7.00	9.00
NICKEL PLATED EACH	1.75	2.00	2.25	2.80	3.55	4.35	5.40	6.00	7.00	7.50	10.00

E-238 NUMBER	282	283	284	285	286	287	288	289	290	291	292
OUTSIDE DIAMETER OF GLASS INCHES	1 1/2	1 1/2	1 3/4	2	2 1/2	2 1/2	2 3/4	3	3	3 1/2	3 1/2
HEIGHT OF GLASS INCHES	1 5/8	1 5/8	1 1/2	1 3/4	2 1/2	2 3/8	2 1/2	2 3/4	3	3 1/2	4
CAPACITY OUNCES	1/2	3/4	1	2	3	4	6	7	8	12	16
PIPE THREAD INCH	1/4	1/4	1/4	3/8	3/8	3/8	1/2	1/2	1/2	1/2	1/2
BRASS FINISH EACH	1.25	1.33	1.45	1.75	2.25	3.00	4.00	5.00	5.50	6.50	7.00
NICKEL PLATED EACH	1.50	1.62	1.75	2.05	2.55	3.30	4.35	5.40	6.00	7.00	7.50



E-240.

AUTOMATIC NEEDLE VALVE CRANK PIN OIL CUPS.—E-240.

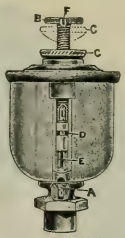
CAPACITY OUNCES	3/4	1	1½	2½	3¾	5	10
DIAMETER OF GLASS SHELL INCHES	1 1/2	1 5/8	1 3/4	2	2 3/8	2 3/4	3 1/2
SIZE OF SHANK, PIPE THREAD INCHES	1/4	1/4	3/8	3/8	3/8	1/2	1/2
FINISHED BRASS EACH	1.50	2.00	2.70	3.35	4.00	6.35	10.00



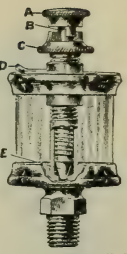
E-242. SIGHT FEED.



E-244. SIGHT FEED.



E-246. CRANK PIN.



E-248. ADJUSTABLE FEED.

LONERGAN GLASS OILERS.

E-242 NUMBER	25	25½	26	26½	27	27½	27½
OUTSIDE DIAMETER OF GLASS INCHES	2	2⅜	2¾	3¼	3½	3¾	4½
HEIGHT OF GLASS INCHES	5	5¼	5½	6½	7½	9½	11
CAPACITY OUNCES	1½	2	3	5	8	12	1 Pt.
PRICE EACH	3.00	3.50	3.85	4.20	4.85	5.65	6.50

E-244 NUMBER	28	29
OUTSIDE DIAMETER OF GLASS INCHES	3¾	4½
HEIGHT OF GLASS INCHES	9½	11
CAPACITY OUNCES	12	1½ Pt.
PRICE EACH	8.30	11.00

E-246 NUMBER	90	91	92	93	94	95	96	97
OUTSIDE DIAMETER OF GLASS INCHES	1⅞	2	2½	2⅝	3⅛	3½	3¾	3¾
HEIGHT OF GLASS INCHES	3⅛	3⅞	4	4½	5	5¼	5⅝	6¼
CAPACITY OUNCES	¾	1¼	2¼	3½	5	8	12	16
PRICE EACH	1.85	2.00	2.35	2.65	3.00	3.35	3.85	4.50

E-248 NUMBER	83	84	85	86	87	88	89
OUTSIDE DIAMETER OF GLASS INCHES	1½	1¾	2	2¼	2½	2¾	3
HEIGHT OF GLASS INCHES	1⅜	1½	1⅝	2⅛	2⅜	2½	3¼
CAPACITY OUNCES	⅜	1	2	3	4	6	8
PIPE THREAD INCHES	⅛	⅛	⅛	⅛	⅛	¼	¼
PRICE EACH	1.00	1.30	1.60	2.00	3.00	4.00	5.00

PENBERTHY "SAFETY" AUTOMATIC DOUBLE-FEED CRANK-PIN OILERS.



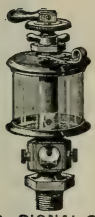
E-250.
REGULAR STYLE.

CAPACITY OUNCES	⅝	1	1½	2½	4	5
OUTSIDE DIAMETER OF GLASS INCHES	1¼	1½	1¾	2	2¼	2½
HEIGHT OF GLASS INCHES	1⅜	1⅜	1½	1¾	2⅛	2⅜
PIPE THREAD OF SHANK INCH	¼	¼	⅛	⅛	½	½
BRASS FINISH EACH	1.50	1.75	2.00	2.50	3.00	4.00
EXTRA GLASSES NET, EACH	.08	.10	.11	.12	.15	.25
EXTRA CORK WASHERS NET, EACH	.02	.03	.03	.04	.04	.05

All sizes made in both Regular and Locomotive style.



E-251.
LOCOMOTIVE STYLE.



E-270. SIGNAL OILER. LEVER UP.



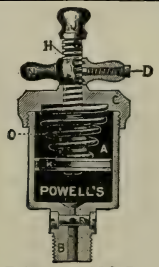
E-272. ENGINE OILER. WITH SNAP LEVER.



E-274. CROSS-BAR OILER. STOP FEED.

POWELL'S GLASS ENGINE OILERS.—E-270, E-272 and E-274.

NUMBER	00	0	1	1½	2	3	4	5	6
CAPACITY OUNCES	¼	½	⅝	1	2	¼ Pt.	⅓ Pt.	½ Pt.	1 Pt.
DIAMETER OF GLASS INCHES	1	1¼	1½	1⅝	2	2¼	2½	3	3½
SIZE IRON PIPE CONNECTION INCH	⅛	¼	¼	⅜	⅜	⅜	½	½	½
SIGNAL OILER, FINISHED EACH	----	3.00	3.25	3.50	3.75	4.25	5.25	7.25	9.25
ENGINE OILER, FINISHED EACH	.75	.80	1.00	1.25	1.50	1.90	2.40	3.10	4.00
CROSS-BAR OILER, FINISHED EACH	1.30	1.40	1.50	1.75	2.00	2.25	2.65	3.35	4.50
EXTRA GLASSES, WITH WASHERS NET, EACH	.15	.20	.25	.30	.35	.40	.60	.80	1.50



E-275. CLASS B.



E-278. CLASS C.



E-280. ALL IRON.

POWELL'S IMPROVED GREASE CUPS.

NUMBER	00	0	1	2	3	4
CAPACITY OUNCES	½	1	1½	3	6	10
DIAMETER OF BODY INCHES	1	1¼	1½	2	2½	3
SIZE IRON PIPE CONNECTION INCH	⅛	¼	⅜	⅜	½	½
E-275—CLASS B, FINISHED EACH	1.50	2.00	2.50	3.20	4.30	6.00
E-278—CLASS C, FINISHED EACH	1.75	2.10	2.50	2.85	4.25	----
E-280—ALL IRON, PAINTED EACH	.85	.95	1.00	1.05	2.25	----

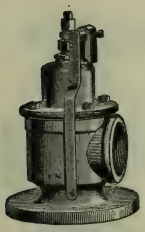


E-284. STAHL GREASE CUP.

STAHL ALL IRON CONICAL BASE GREASE CUPS.—E-284.

NUMBER	0	1	2	3	4	5
INSIDE DIAMETER INCHES	1⅛	1½	2	2⅜	3	4
CAPACITY OUNCES	½	1	1½	3½	7	22
PIPE THREAD INCHES	¼	¼	⅜	⅜	½	¾
PRICE EACH	.40	.50	.65	.75	1.00	2.85

ENGINE AND BOILER TRIMMINGS.



E-290. STATIONARY.



E-291. BRASS PORTABLE.



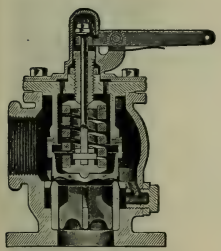
E-292. "STANDARD" WATER RELIEF VALVE.



E-293. "UNDERWRITER" RELIEF VALVE.

*CROSBY POP SAFETY AND WATER RELIEF VALVES.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
HORSE-POWER OF BOILER .	5	10	20	30	40	75	100	125	150	175	200	200
E-290, WITHOUT LOCKUP. .	-----	-----	-----	-----	30.00	50.00	65.00	80.00	100.00	125.00	160.00	250.00
E-290, WITH LOCKUP	-----	-----	-----	-----	35.00	55.00	75.00	90.00	110.00	135.00	170.00	270.00
E-291	10.00	12.00	15.00	20.00	30.00	-----	-----	-----	-----	-----	-----	-----
E-292, IRON	-----	-----	-----	-----	30.00	50.00	65.00	80.00	100.00	125.00	160.00	250.00
E-292, BRASS	10.00	12.00	15.00	20.00	30.00	-----	-----	-----	-----	-----	-----	-----
E-293, IRON	-----	-----	-----	-----	30.00	50.00	65.00	80.00	100.00	125.00	160.00	250.00



E-295. STATIONARY.



E-296. BRASS PORTABLE.



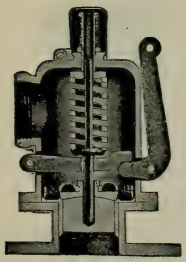
E-298. WATER RELIEF VALVE.

*ASHTON POP SAFETY AND RELIEF VALVES.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
DIAMETER OF INLET FLANGE .	----	----	-----	-----	7	8	9	10	10	12	12	14
HORSE-POWER OF BOILER . .	8	10	15	25	35	50	75	100	120	140	170	200
E-295, IRON	----	----	-----	-----	30.00	40.00	55.00	64.00	70.00	80.00	85.00	125.00
E-296, BRASS	6.00	8.00	10.00	12.00	22.00	-----	-----	-----	-----	-----	-----	-----
E-298, IRON	----	----	-----	30.00	40.00	60.00	75.00	80.00	85.00	105.00	125.00	150.00
E-298, BRASS	7.00	9.00	12.50	16.50	23.00	40.00	65.00	-----	-----	-----	-----	-----

*In ordering Safety Valves, state pressure to blow off, and whether screwed or flanged ends.

ENGINE AND BOILER TRIMMINGS.



E-300.
STATIONARY.



E-302.
BRASS, PORTABLE.



E-304. BRASS
WATER RELIEF VALVE.



E-306. IRON
WATER RELIEF VALVE.

AMERICAN POP SAFETY AND RELIEF VALVES.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
DIAMETER BASE FLANGE . INCHES	----	----	----	----	----	8	10	10	11	----	11	12
HORSE-POWER OF BOILER . . .	6	10	20	30	40	75	100	125	150	175	200	225
E-300 . . . . . EACH	----	----	----	----	30.00	50.00	65.00	80.00	100.00	115.00	125.00	180.00
E-302 . . . . . EACH	10.00	12.00	15.00	20.00	30.00	----	----	----	----	----	----	----
E-304 . . . . . EACH	----	12.00	15.00	20.00	40.00	62.00	80.00	----	----	----	----	----
E-306 . . . . . EACH	----	----	----	----	30.00	50.00	65.00	80.00	100.00	----	150.00	180.00



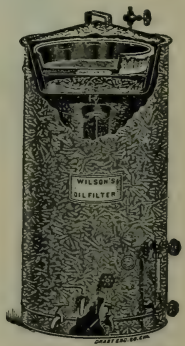
E-310. OIL WASTE CAN.



E-312. CONE TOP OIL CAN.

E-310. OIL WASTE CAN, DIAMETER 11¼ INCHES, HEIGHT 15 INCHES	EACH	2.50
E-312. WITH TWO PUMPS, MEASURING AND LIFT, CAPACITY 60 GALLONS	EACH	20.00

Special sizes Oil Waste Cans to order.

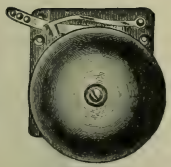


E-313. OIL FILTER.

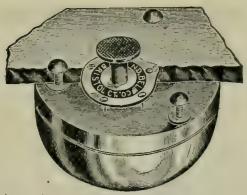
OIL FILTERS.—E-313.

NUMBER	15	25	30	40
DAILY CAPACITY . . . . . GALLONS	3 to 5	4 to 7	5 to 9	6 to 12
DIAMETER, OUTSIDE . . . . . INCHES	15	16	18	19½
HEIGHT, OUTSIDE . . . . . INCHES	28	32	36	40
PRICE . . . . . EACH	25.00	30.00	32.50	37.50

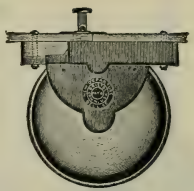
Send for special circular, giving directions for using.



E-314. GONG BELL.



E-315, NEW DEPARTURE FIRE BELL.



E-316. CHIEF'S BUGGY BELL.

GONG BELLS, POLISHED BELL METAL.—E-314.

DIAMETER . . . . . INCHES	4	5	6	7	8	10	12	14	16	18
EACH	2.75	3.25	3.90	5.00	6.00	8.00	14.00	25.00	30.00	35.00

FIRE BELLS.—E-315 and E-316.

DIAMETER . . . . . INCHES	9	10	11	13
E-315. FULL NICKEL, OR NATURAL BRONZE WITH NICKEL TRIMMINGS . . . . . EACH	22.00	-----	28.00	36.00
E-316. FULL NICKEL PLATED THROUGHOUT . . . . . EACH	-----	26.00	-----	-----

In the Fire Bell, the striking hammers continue to revolve after the plungers are released, so that frequent pushing of the plunger gives a continuous alarm.

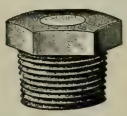
In the Buggy Bell, the hammers are placed on opposite sides so that (as two gongs are used) each hammer strikes its respective gong and result is a chime of great power, unlike any other bell ever used.



E-317. STARRETT'S HIGH SPEED INDICATOR.

This Indicator may be run at highest speed required without heating, and this on account of our frictionless bearing, against which the inner end of the spindle revolves (a patented feature). Each 1.50

If with Spindle, 7½ inches long, for use on Dairy Machines, extra, 50 cents.



E-318.

FUSIBLE PLUGS.—E-318.

SIZE	½	¾	1	1¼	1½	2
EACH	.60	.75	1.00	1.50	2.00	3.00



E-319. NOISELESS HEATER.

NOISELESS WATER HEATER, OR STEAM MUFFLER.—E-319.

NUMBER	G	H	J	K	L	M	N
PRICE . . . . . EACH	1.75	2.00	2.50	3.00	4.00	5.00	8.00
STEAM PIPE CONNECTION . INCHES	⅜	½	¾	1	1¼	1½	2
DISCHARGE PIPE CONNECTION. INCHES	½	1	1	1¼	1½	2	2½
CAPACITY . . . . . *GALLONS	60	75	100	125	175	250	500

*Number of gallons of water heated from 70 degrees to 210 degrees, in 30 minutes, with 70 pounds of steam pressure.

DIRECTIONS.—Screw into Delivery end of Heater a piece of pipe 10 to 14 inches in length, then attach heater to end of steam pipe below the surface of the liquid, and it will heat it quickly and without waste of steam.

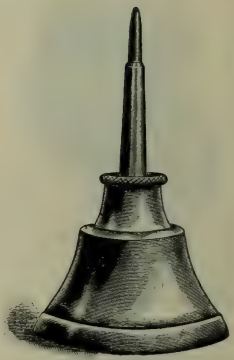
ENGINE AND BOILER TRIMMINGS.



E-320. NO. 13 AND SMALLER.



E-321. NO. 14 AND LARGER.



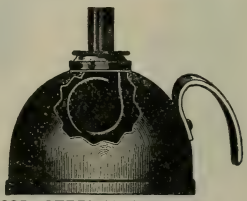
E-322. MALLEABLE OILER.



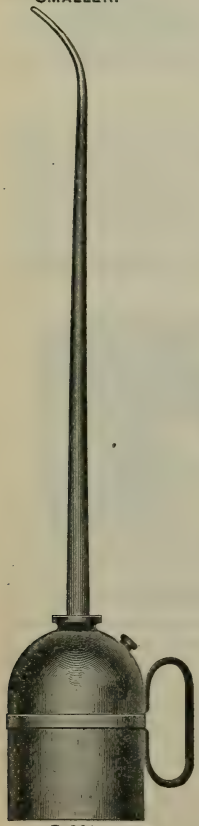
E-323. ENGINEERS' FILLER.



E-324. STEEL TALLOW POT.



E-325. STEEL JACKET LAMP.



E-326. RAILROAD OILER.



E-327. ENGINEERS' SET.

For lists, see next page.

ENGINE AND BOILER TRIMMINGS.

BRASS AND STEEL OILERS.—E-320 and E-321.

NUMBER	12	13	14	14*a*	14*b*	15	16
DIAMETER INCHES	2¾	3⅜	3⅜	3¾	3¾	4¼	4¼
LENGTH OF SPOUT INCHES	2½	3	9	3	9	3	9
STEEL PER DOZEN	4.50	5.50	6.50	7.50	8.50	9.25	10.50
BRASS PER DOZEN	6.50	8.00	9.20	----	----	12.00	14.00

MALLEABLE OILERS AND HAND LAMPS.—E-322.

NUMBER	1	2	3
MALLEABLE OILERS PER DOZEN	3.60	4.00	4.40
MALLEABLE HAND LAMPS, WITH WICK TUBES PER DOZEN	5.00	----	----

ENGINEERS' FILLERS.—E-323.

NUMBER	19	19*a*	210	211	190	200	201
CAPACITY	1 Pint	1½ Pints	1 Quart	2 Quarts	1½ Pints	1 Quart	2 Quarts
STEEL PER DOZEN	14.00	17.00	20.00	24.00	----	----	----
BRASS PER DOZEN	----	----	----	----	22.00	30.00	34.00

Add to above lists for Patent Attachment, $1.00 per dozen.

STEEL TALLOW POTS.—E-324.

5 INCHES DIAMETER, 5 INCHES HIGH, CAPACITY 1 QUART PER DOZEN	21.00
6 INCHES DIAMETER, 6 INCHES HIGH, CAPACITY 2 QUARTS PER DOZEN	25.00

STEEL JACKET LAMPS.—E-325.

DIAMETER INCHES	3⅜	3¾	4¼
PER DOZEN	6.00	9.00	12.00

RAILROAD OILERS.—E-326.

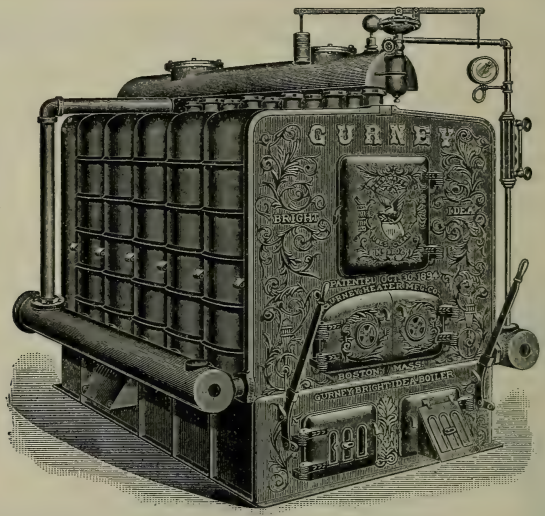
NUMBER	10	11	11*a*	17	18	18*a*
DIAMETER INCHES	3⅜	4¼	5	3⅜	4¼	5
HEIGHT INCHES	5	6	8	5	6	8
LENGTH OF SPOUT INCHES	12	18	18	12	18	18
CAPACITY	1 Pint	1 Quart	2 Quarts	1 Pint	1 Quart	2 Quarts
STEEL PER DOZEN	14.00	18.00	20.00	----	----	----
BRASS PER DOZEN	----	----	----	18.00	21.00	24.00

OILER SETS.—E-327.

NUMBER OF PIECES	5	6
ENGINEERS' BRASS SETS EACH	7.00	10.00
ENGINEERS' NICKEL-PLATED SETS EACH	8.00	11.00
STEAMBOAT BRASS SETS EACH	7.00	10.00
STEAMBOAT NICKEL-PLATED SETS EACH	9.00	12.00

Steamboat sets are so made as to prevent the motion of the vessel displacing the oilers.

SAFETY WATER TUBE HOT WATER HEATERS AND STEAM BOILERS.



F-5. GURNEY BRIGHT IDEA BOILERS.

HOT WATER.

600 SERIES — NUMBER				600	601	602	603
SIZE OF GRATE — INCHES				26 x 24	26 x 35	26 x 46	26 x 57
ACTUAL CAPACITY, DIRECT RADIATION — SQUARE FEET				1500	2000	2475	2975
PRICE — EACH				360.00	450.00	540.00	630.00
1100 AND 1200 SERIES — NUMBER	1100	1101	1102	1200	1201	1202	1203
SIZE OF GRATE — INCHES	40 x 38	40 x 50	40 x 62	48 x 42	48 x 56	48 x 70	48 x 84
ACTUAL CAPACITY, DIRECT RADIATION — SQ. FT.	2900	3725	4550	5000	6600	9100	11600
PRICE — EACH	615.00	750.00	850.00	910.00	1100.00	1410.00	1710.00

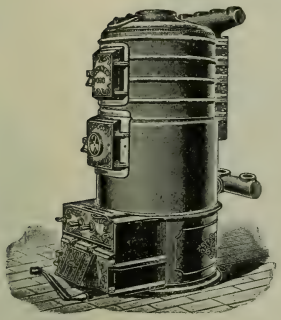
STEAM.

600 SERIES — NUMBER				600	601	602	603
SIZE OF GRATE — INCHES				26 x 24	26 x 35	26 x 46	26 x 57
ACTUAL CAPACITY, DIRECT RADIATION — SQUARE FEET				900	1200	1500	1800
PRICE — EACH				370.00	460.00	550.00	640.00
1100 AND 1200 SERIES — NUMBER	1100	1101	1102	1200	1201	1202	1203
SIZE OF GRATE — INCHES	40 x 38	40 x 50	40 x 62	48 x 42	48 x 56	48 x 70	48 x 84
ACTUAL CAPACITY, DIRECT RADIATION — SQ. FT.	1750	2250	2750	3000	4000	5500	7000
PRICE — EACH	625.00	770.00	870.00	920.00	1120.00	1420.00	1720.00

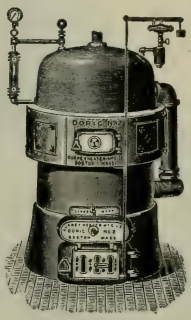
Steam Boilers are furnished with the following Trimmings: Steam Gauge, Water Column, 3-Gauge Cocks, Glass Water Gauge and Automatic Damper Regulator. Also Cleaning Brush and a set of heavy Fire Tools. Hard or Soft Coal, Natural Gas, Coke or Wood may be used for fuel.

Send for special catalogue, illustrating and describing all styles.

HOT WATER HEATERS AND STEAM BOILERS.



F-10. 400 SERIES HOT WATER HEATER.



F-15. DORIC STEAM HEATER.

400 SERIES HOT WATER HEATERS.—F-10.

NUMBER	400	401	402	403	404	405	406	407	408	409
DIAMETER OF GRATE . . . . . INCHES	17	17	20	22	25	27	29	32	35	35
ACTUAL CAPACITY, DIRECT RADIATION SQUARE FEET	300	400	550	650	850	1100	1400	1675	2000	2200
PRICE . . . . . EACH	96.00	122.00	152.00	175.00	215.00	280.00	335.00	385.00	440.00	480.00

400 SERIES STEAM HEATERS.—F-10.

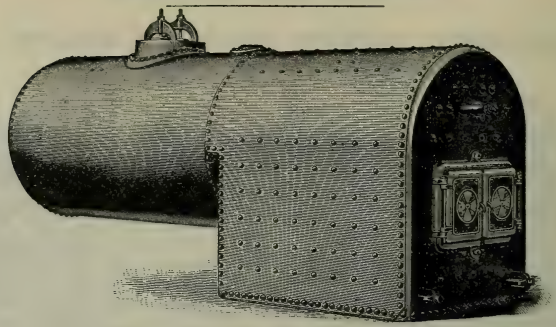
NUMBER	415	425	435	445	455	465	475	485
DIAMETER OF GRATE . . . . . INCHES	17	20	22	25	27	29	32	35
ACTUAL CAPACITY, DIRECT RADIATION . . SQUARE FEET	250	325	425	525	675	850	1025	1200
PRICE . . . . . EACH	133.00	160 00	195.00	230.00	290.00	345.00	397.00	450.00

DORIC HOT WATER HEATERS.—F-15.

NUMBER	00	0	1	2	3	4	5
DIAMETER OF GRATE . . . . . INCHES	11	14	17	20	23	26	30
ACTUAL CAPACITY, DIRECT RADIATION . . . SQUARE FEET	225	350	450	625	775	1000	1575
PRICE . . . . . EACH	55.00	80.00	120.00	155.00	190.00	240.00	365 00

DORIC STEAM HEATERS.—F-15.

NUMBER	0	1	2	3	4	5
DIAMETER OF GRATE . . . . . INCHES	14	17	20	23	26	30
ACTUAL CAPACITY, DIRECT RADIATION . SQUARE FEET	200	275	375	475	600	950
PRICE . . . . . EACH	100.00	130.00	165.00	202.00	250.00	375.00



F-20. STANDARD FIRE BOX BOILERS FOR STEAM HEATING.

DIMENSIONS AND CAPACITIES.

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DIAMETER OF SHELL . IN.	30	30	30	36	36	36	42	42	42	48	48	48	54	54
LENGTH OVER ALL . . FT.	6½	7½	8½	7½	9	10½	8½	10	11½	10½	12	13½	14	16½
NUMBER OF TUBES . .	40	40	40	40	40	40	52	52	52	48	48	48	34	34
DIAMETER OF TUBES . IN.	2	2	2	2½	2½	2½	2½	2½	2½	3	3	3	4	4
LENGTH OF TUBES . . IN.	48	54	61	55	67	79	61	73	85	79	91	103	108	132
LENGTH OF FIREBOX . IN.	26	32	38	32	38	44	38	44	50	44	50	56	56	62
WIDTH OF FIREBOX . . IN.	24	24	24	30	30	30	36	36	36	42	42	42	48	48
HEIGHT OF FIREBOX . IN.	31	31	31	36	36	36	41	41	41	45	45	45	46	46
THICKNESS OF SHELL IN.	¼	¼	¼	¼	¼	¼	¼	¼	¼	5/16	5/16	5/16	5/16	5/16
THICKNESS OF HEADS AND FIREBOX . . . . IN.	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	3/8	3/8	3/8	3/8	3/8
DEPTH OF WATER LEG IN.	10	10	10	11	11	11	13	13	13	13	13	13	14	14
FIRE DOORS, SINGLE IN.	12x18	12x18	12x18	----	----	----	----	----	----	----	----	----	----	----
FIRE DOORS, DOUBLE IN.	----	----	----	14x24	14x24	14x24	14x24	14x24	14x24	18x30	18x30	18x30	18x30	18x30
SIZE SMOKE PIPE . IN.	16	16	16	18	18	18	20	20	20	22	22	22	24	24
WT., BOILER ONLY LBS.	1750	2000	2450	2900	3300	3700	3900	4400	4800	5900	6500	7200	7700	9200
WEIGHT, CASTINGS LBS.	375	425	500	520	570	600	620	680	740	780	850	1150	1420	1545
TAPPING—														
STEAM, OUTLET . IN.	3	3	4	4	4	4	4	6	6	6	6	6	7	7
RETURN, INLET . . IN.	2½	2½	3	3	3	3	3	4	4	4	4	4	5	5
TAPPING FOR WATER—														
FLOWS . . . . . IN.	2-4	2-4	2-4	2-4	2-5	2-5	2-5	2-5	2-6	2-6	2-6	2-6	2-7	2-7
RETURNS . . . . IN.	2-4	2-4	2-4	2-4	2-5	2-5	2-5	2-5	2-6	2-6	2-6	2-6	2-7	2-7
TOTAL HEATING SURFACE . . SQ. FT.	152	172	194	211	252	292	295	347	399	421	482	541	580	720
GRATE AREA . . SQ. FT.	4.3	5.3	6.3	6.7	8	9.2	9.5	11	12.5	13	14.7	16.4	18.6	20.6
STEAM RADIATION WILL CARRY, DIRECT . FT.	850	950	1100	1200	1500	1800	1800	2200	2600	2800	3300	3800	4500	5800
WATER RADIATION WILL CARRY, DIRECT . . FT.	1350	1500	1750	1900	2400	2900	2900	3500	4150	4500	5300	6100	7200	9300

PRICES.

BOILER ONLY . . EACH	195.00	205.00	212.00	243.00	272.00	303.00	320.00	353.00	397.00	442.00	479.00	514.00	617.00	662.00
FIRE DOOR AND FRAME . . . . EACH	4.00	4.00	4.00	6.00	6.00	6.00	7.00	7.00	7.00	9.00	9.00	9.00	9.00	9.00
ASH PIT FRONT . EACH	6.00	6.00	6.00	6.00	6.00	6.00	7.00	7.00	7.00	8.00	8.00	8.00	8.00	8.00
LARGE SOOT DOOR EACH	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
FOUR SMALL SOOT DOORS . . . . EACH	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
CENTURY ROCKING GRATE . . . . EACH	11.00	14.00	17.00	18.00	22.00	25.00	26.00	30.00	34.00	35.00	40.00	44.00	51.00	56.00
BOILER AND CASTINGS .	220.00	233.00	243.00	277.00	310.00	344.00	364.00	401.00	449.00	498.00	540.00	579.00	689.00	739.00
TRIMMINGS, EXTRA . . .	13.00	13.00	13.00	14.00	14.00	14.00	15.00	15.00	15.00	16.00	16.00	16.00	18.00	18.00

Above lists do not include Domes. Manholes and Double Fire Doors in all Boilers over 30 inches diameter.

CLOW TRIUMPH WATER HEATERS.

TESTED TO 200 POUNDS PRESSURE.



F-24. STYLE A.



F-29. 0 AND 0½ WITHOUT MAGAZINE.



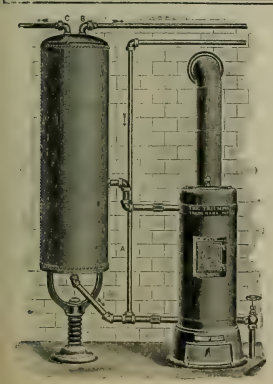
F-32. 0 AND 0½ WITH MAGAZINE.



F-32. SECTIONAL VIEW.

CLOW TRIUMPH WATER HEATERS. (PATENTED.)

NUMBER	A	0	0½
F-24. WITH FIRE DOOR IN TOP . . . . . EACH	18.00	------	------
F-29. WITH FIRE DOOR IN SIDE, PLAIN HOOD . . . . . EACH	------	25.00	30.00
F-32. WITH FIRE DOOR IN SIDE, MAGAZINE HOOD . . . . . EACH	------	28.00	33.00
*HEATING CAPACITY . . . . . GALLONS PER HOUR	55	90	120
SIZE OF RANGE BOILER OR TANK SUITABLE FOR . . . . . GALLONS	30 to 53	60 to 85	98 to 120
NUMBER OF BATH ROOMS SUITABLE FOR	1	1 to 2	2 to 3
†HEATING CAPACITY FOR RADIATION . . . . . SQUARE FEET	45	80	105
FIRE SURFACE IN HEATER . . . . . SQUARE FEET	3½	6	8
NUMBER OF OUTLETS AND SIZE . . . . . INCHES	2–1	2–1	2–1
NUMBER OF INLETS AND SIZE . . . . . INCHES	2–1	2–1	2–1
SIZE OF SMOKE PIPE SUITABLE FOR . . . . . INCHES	5	6	6
DIAMETER OF HEATER . . . . . INCHES	12	12	12
HEIGHT OF HEATER . . . . . INCHES	28	31	35
APPROXIMATE WEIGHT . . . . . POUNDS	140	160	175

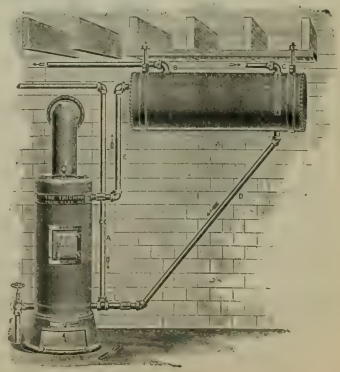


*To the temperature ordinarily required at hot water faucets.

†Including flow and return pipes as part of radiation or with flow and return pipes covered.

Send for special circulars.

For perfect hot water circulation, we recommend tapping all Steel Tanks as per the Clow Standard, shown herewith. Explanation: C, cold water supply to Tank; D, cold water supply to Heater; E, hot water from Heater to Tank; B, hot water from Tank to house supply; A, return from fixtures. All openings threaded for Iron Pipe, as follows: Tanks 145-gallon or less, 1¼-inch; 150 to 575-gallon, 2-inch; 650-gallon and larger, 3-inch.



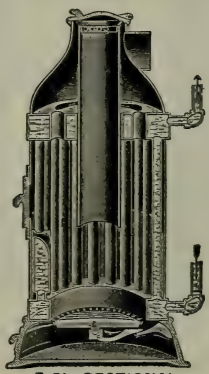
CLOW TRIUMPH WATER HEATERS.

TESTED TO 200 POUNDS PRESSURE.

FOR HEATING WATER FOR APARTMENT BUILDINGS, BATHS, BARBER SHOPS, BAPTISTRIES, AND TO SUPPLY RADIATION FOR RESIDENCES, OFFICES, STORES, GREENHOUSES, CONSERVATORIES, POULTRY HOUSES, ETC.



F-50. WITH PLAIN HOOD.



F-51. SECTIONAL.



F-51. WITH MAGAZINE HOOD.

Our Water Heaters, illustrated above, have a hollow cast iron ring below, a ring or chamber above and a water front under the fire-door. These are connected by a series of vertical wrought iron tubes, which are arranged in a circle and surrounded by a jacket of sheet steel. The rings, water front and tubes contain the water and all come in direct contact with the fire or flame, making the heating surface unusually effective and insuring economy in the use of fuel. In addition to this fire surface sizes Nos. 4 and 6 have a coil inside the fire-box. One end of this coil connects with the upper ring and the other end with one of the tubes, thus securing a perfect circulation.

In Nos. 1 to 2½ the products of combustion pass through the central opening in the upper ring to the smoke-bonnet or hood. In sizes 3 to 6 they pass through flues in the upper ring or chamber to the hood. In all sizes with a plain hood the smoke-pipe collar is at the center of the hood. In all sizes with a magazine hood the smoke-pipe collar is at the side of the hood, while the cylinder for the coal is fed through a door at the top and passes through the central opening of the upper ring into the fire-box of the boiler.

Cast iron shields fit in the spaces between and behind the tubes, extending around the heater and vertically from top of bottom ring as high as bottom of fire-door. These shields prevent accumulation of ashes between the tubes. They also become hot and radiate their heat to parts of tubes not exposed to the fire. There is an air space between them and the outer sheet steel jacket.

All sizes, whether furnished with a plain or magazine hood, have a fire-door at the side. The ash box is provided with a good shaking and dumping grate. As indicated in above sectional, the upper ring is tapped for connecting the flow or supply pipes and the lower ring for the return pipes. These heaters are made tight at 200 pounds cold water pressure. The tubes are screwed into the lower ring and both screwed and packed by lock-nuts at the upper ring. All parts are made interchangeable.

Write for special circular.

PRICE LIST.

NUMBER	1	2	2½	3	3½	4	5	6
F-50. PLAIN HOOD . . . . . EACH	40.00	50.00	65.00	75.00	85.00	100.00	145.00	175.00
F-51. MAGAZINE HOOD . . . . . EACH	45.00	55.00	70.00	85.00	95.00	110.00	155.00	185.00
*HEATING CAPACITY . . . GALLONS PER HOUR	150	200	275	350	450	560	750	900
SIZE OF STANDARD TANK SUITABLE FOR . GALLONS	120 to 180	180 to 215	250 to 315	315 to 365	420 to 480	500 to 625	650 to 750	860 to 1000
NUMBER OF APARTMENTS WILL SUPPLY WATER FOR	3 to 5	6 to 8	8 to 10	12 to 15	15 to 18	18 to 25	25 to 35	35 to 45
†HEATING CAPACITY FOR RADIATION SQUARE FEET	135	160	245	335	400	485	665	800
FIRE SURFACE IN HEATER . . . SQUARE FEET	10	12	18½	25	31½	38	50	60
NUMBER OF OUTLETS AND SIZE . . . . INCHES	2–1¼	2–1¼	3–1¼	3–2	3–2	3–2	2–3	2–3
NUMBER OF INLETS AND SIZE . . . . . INCHES	2–1¼	2–1¼	3–1¼	3–2	3–2	3–2	2–3	2–3
SIZE SMOKE PIPES SUITABLE FOR . . . INCHES	6	6	7	7	7	7	10	10
DIAMETER . . . . . INCHES	14	16	18	21	21	21	30	30
HEIGHT (F-51) . . . . . INCHES	48	48	50	55	64	68	70	70
APPROXIMATE WEIGHT (F-51) . . . . POUNDS	320	400	520	660	710	790	1325	1425

*To the temperature ordinarily required at hot water faucets.

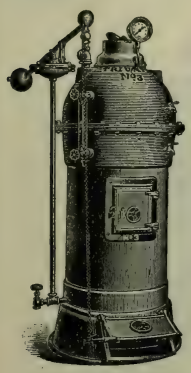
†Including flow and return pipes as parts of radiation or with flow and return pipes covered.

The fixtures consist of an ash-box with grate, grate rest and shaker.

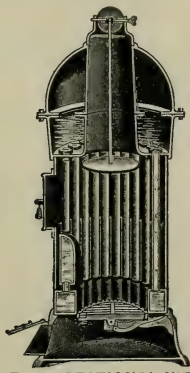
CLOW TRIUMPH STEAM HEATERS.

PATENTED.

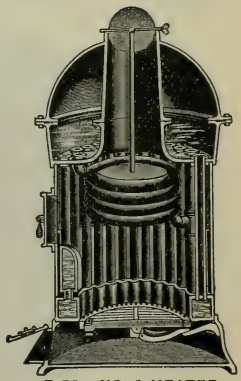
FOR HEATING RESIDENCES, APARTMENT BUILDINGS, STORES, ETC.



F-55. NO. 3 HEATER.



F-55. SECTIONAL VIEW.



F-59. NO. 6 HEATER.

In all sizes the upper part of the boiler consists of a steam dome cast in two sections and the lower part of a hollow ring and water front. The upper and lower parts of the boiler as above described are connected by a series of wrought iron tubes, which are arranged in a circle and surrounded by a jacket of sheet steel. The ring, water front, tubes and lower part of the dome contain the water and all come in direct contact with the fire or flame, making the heating surface unusually effective and insuring economy in the use of fuel.

Nos. 4 and 6 also have a coil of pipe placed inside the fire-box to increase their capacity. One end of the coil connects with the bottom of the steam dome and the other end with one of the tubes, thus insuring a perfect circulation. A good shaking and dumping grate is provided with each heater. A fusible safety plug is screwed into the bottom of the dome. In our smallest sizes, Nos. 1 to 2½, the smoke pipe collar is placed opposite the fuel-door. In sizes 3 to 6 a large flue passes vertically through the center of the dome and the smoke-pipe collar is attached to the upper end of this. In these sizes also a round plate or flame-deflector is suspended by a rod from the smoke-damper. This deflector causes the flame from the fire to divide and spread over the tubes and bottom of the dome before passing through the flue and out through the smoke-pipe. Cast iron shields, as described in connection with the steam generators, also protect the tubes of these heaters.

The manner of putting the parts together is as follows: The lower ends of the tubes are screwed into the ring and water-front and the upper ends are connected by double lock-nuts to the dome. The upper and lower parts of the dome have broad flanges, where they adjoin each other, which are well packed and firmly bolted together. Tested to 100 pounds cold water pressure.

Write for special circular.

PRICE LIST.

NUMBER	1	2	2½	3	4	5	6
PRICE. EACH	65.00	75.00	90.00	100.00	125.00	205.00	235.00
DIAMETER INCHES	14	16	18	21	21	30	30
HEIGHT OVER ALL INCHES	48	50	60	60	69	72	72
FIRE SURFACE SQUARE FEET	10	12	18½	25	38	50	60
*HEATING CAPACITY FOR RADIATORS SQUARE FEET	100	120	185	250	365	500	600
†NUMBER OF OUTLETS AND SIZE INCHES	1–1½	1–1½	2–1½	2–2	2–2	2–2½	2–2½
†NUMBER OF INLETS AND SIZE INCHES	1–1½	1–1½	2–1¼	2–1½	2–1½	2–2	2–2
APPROXIMATE WEIGHT POUNDS	400	500	700	900	1000	1875	2000
SIZE OF SMOKE PIPE SUITABLE INCHES	6	6	7	7	7	10	10

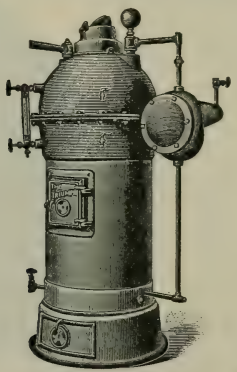
*Direct surface, including or with flow and return pipes covered. †Unless otherwise ordered.

The fixtures comprise an ash-box, grate, grate-rest and shaker, automatic damper regulator with chain and swinging ash-box door attached, steam gauge, water gauge, gauge cocks, low-pressure safety valve and blow-off valve. Sizes Nos. 3 to 6 also have a smoke-pipe damper, rod and flame deflector.

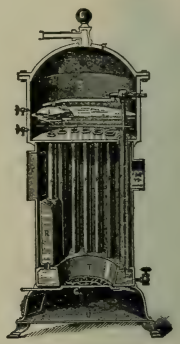
CLOW TRIUMPH STEAM GENERATORS.

PATENTED.

EXTENSIVELY IN USE FOR LOW PRESSURE WORK, ESPECIALLY IN CITIES.



F-62. STEAM GENERATOR
SIZES 3 TO 4½.



F-63. SECTIONAL VIEW
SIZES 1 TO 2½.

The general description of the Triumph Steam Heaters is also applicable to the Triumph Steam Generators, viz: They have a ring below, a water front beneath the fire door, water tubes surrounding fire and steam dome above. Size No. 4, however, has no coil. In sizes 1 to 2½ the smoke-pipe collar is opposite the fire door. In sizes 3 to 4½ the products of combustion pass through a large central flue, to the upper end of which the smoke-pipe collar is attached. Cast iron shields fit in the spaces between and behind the tubes and extend around the heater from top of bottom ring and as high as bottom of fire door. These shields prevent accumulation of ashes beween the tubes. They also become hot and radiate their heat to parts of tubes not exposed to fire. There is an air space between them and the outer sheet steel jacket. In the smaller sizes a float and valve to automatically regulate the water supply is placed inside the steam dome, while in the larger sizes this water-regulating device is contained within an iron float box outside of the boiler but connects with the pipes as shown. The safety valve is set to blow off at about 12 pounds pressure and the float has buoyancy enough to shut off the water up to about 30 pounds pressure. In places, therefore, where there is a water works pressure of from 12 to 30 pounds or so, the boiler can be attached at the float valve to a pipe from the hydrant. Where pressure is above or below this, or there is no water works, a supply barrel or iron supply tank can be used. (Send for special catalogue illustrating this feature.)

The use of a float and valve to automatically regulate the water supply, and many other advantages, have led to the general adoption of the "Triumph" Steam Generators for a large variety of uses. But little more skill is required to operate one than an ordinary stove, and in numerous cases they have been ared for entirely by women. They are extensively used in laundries, restaurants, milk depots; also by dyers, nickel-platers, bottlers, and for ordering tobacco, for bake ovens, steaming feathers, making pickles, heating cheese vats, steaming wheat, steaming wood for bending, etc.

PRICE LIST.

NUMBER		1	2	2½	3	4	*4½
PRICE	EACH	50.00	60.00	75.00	90.00	100.00	120.00
DIAMETER	INCHES	14	16	18	21	21	21
HEIGHT OVER ALL	INCHES	48	50	60	60	69	69
APPROXIMATE WEIGHT	POUNDS	350	450	650	850	950	1025
SIZE OF SMOKE PIPE SUITABLE	INCHES	6	6	7	7	7	7

The fixtures include an ash-box, grate, grate-rest and shaker, float and valve, combined safety and vacuum valve, gauge cocks, blow-off valve, and 3½ feet of ¾-inch steam hose with 2½ ft. of iron pipe to convey steam for heating or cooking. In addition to the above sizes, Nos. 3 to 4½ have a smoke-pipe damper with rod and flame deflector and a water gauge. We also furnish a ⅜-inch angle valve and nipple to connect with a water supply pipe from a hydrant, or 5½ feet of ½-inch rubber hose and four ⅜-inch iron nipples to make the two connections with a water supply barrel. Give size number in ordering and state whether for hydrant or barrel connection.

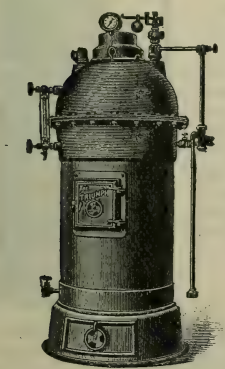
Size No. 1 has capacity to boil a barrel (31 gallons) of water in about 40 minutes after getting up steam; No. 2 in 30 minutes; No. 2½ in 20 minutes; No. 3 in 15 minutes; No. 4 in 12 minutes; No. 4½ in 10 minutes.

*No. 4½ Steam Generator has coil inside of fire-box to increase capacity.

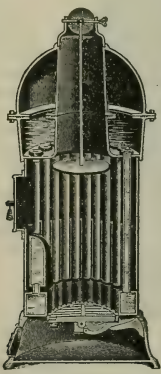
CLOW TRIUMPH SAFETY BOILERS.

PATENTED.

FOR RUNNING SMALL ENGINES, STEAM PUMPS, HEATING JACKET KETTLES, ETC.



F-64. SAFETY BOILERS
SIZES 3 TO 4½.



F-65. SECTIONAL VIEW
SIZES 3 TO 4½.

The above illustrations represent our Triumph Safety Boilers, extensively used for running steam pumps and small engines and for heating jacket kettles. Each size of this type of Triumph Boiler is tested at a cold water pressure of 125 to 150 pounds to the square inch, and intended for a working steam pressure of 70 to 80 pounds. While the general construction is similar to that of our Steam Generators, they have no float and valve and the smaller sizes are made stronger. The division of the water spaces into compartments and tubes and the manner of connecting them one with another make these boilers exceptionally safe. They generate steam shortly after a fire is well started and require only a small amount of fuel to keep them in operation at their full capacity.

The water tubes surrounding the fire and combustion chamber are fully exposed to the action of the heat and contribute greatly to the efficiency of these boilers. They are connected to water chambers above and below to secure perfect circulation. Their upper ends are always submerged, thus avoiding expansion and contraction, with resulting leakage and burning out. Sizes 1 to 2½ have smoke flue opposite fire door instead of passing through steam dome as shown above. These Boilers are in great favor for high pressure work. Their absolute safety is one of their strongest recommendations.

PRICE LIST.

NUMBER	1	2	2½	3	4	*4½
PRICE . . . . . EACH	55.00	65.00	80.00	90.00	100.00	120.00
DIAMETER . . . . . INCHES	14	16	18	21	21	21
HEIGHT OVER ALL . . . . . INCHES	48	50	60	60	69	69
HORSE POWER	1	1½	2	2½	3	4
APPROXIMATE WEIGHT . . . . . POUNDS	375	475	700	800	900	975
SIZE OF SMOKE PIPE SUITABLE . . . . . INCHES	6	6	7	7	7	7

If a hand-pump is desired for feeding in the water we can furnish it in place of an injector.

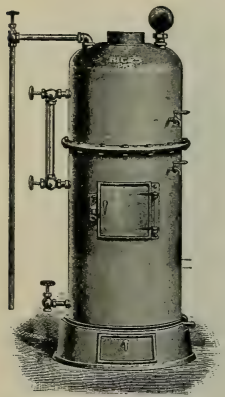
The fixtures furnished consist of an ash-box, grate, grate-rest and shaker, injector with connecting pipes, steam and water gauges, gauge cocks, lever safety valve and blow-off valve. Sizes Nos. 3 to 4½ also have a smoke-pipe damper with rod and flame deflector.

*No. 4½ Safety Boiler has coil inside of fire-box to increase capacity.

THE RICE STEAM GENERATOR.

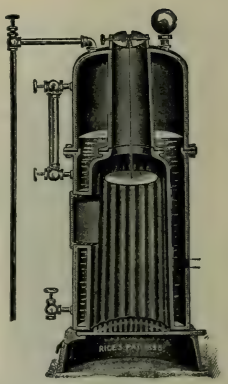
(PATENTED NOV. 19, 1895.)

FOR FARM, DAIRY, PLANTATION USE, ETC.



F-75. SIZE NO. R-2.

This Generator fills a demand for a strong, durable, safe and economical Steam Boiler suitable for generating steam at low pressure. It is unexcelled for heating water, steaming milk cans, steaming food for stock, ordering tobacco, etc. As it has no small smoke flues to choke up with soot and is provided with a good sized combustion chamber, it will burn a variety of fuels. It is especially desirable wherever very hard water is used, as the upper section can be readily unbolted from the lower one, giving complete access to the inside for cleaning out scale or sediment.



F-75. SECTIONAL.

THE RICE STEAM GENERATOR (PATENTED). F-75.

SIZE . . . . . NUMBER	R 2
HEIGHT OF BOILER . . . . . INCHES	50
DIAMETER . . . . . INCHES	16
APPROXIMATE WEIGHT . . . . . POUNDS	425
SIZE OF SMOKE PIPE COLLAR . . . . . INCHES	6
COMPLETE, WITH FIXTURES AND FITTINGS AS DESCRIBED . . . . . EACH	$32.00

Additional cost of Hand Pump for feeding water, $4.00. (This is not necessary where there is sufficient water pressure.)

No. R-2, the only size of this Boiler we are now making, will raise steam inside of fifteen minutes and will boil a barrel of water (31 gallons) in twenty-five minutes after getting up steam. It holds about half a barrel of water when filled nearly to top of water gauge. It will burn hard or soft coal, corncobs, or wood in small or medium sized pieces.

DESCRIPTION.

The Boiler, strongly made of cast-iron, is in two parts, upper and lower, each having inside and outside flange at point of union. Packing between flanges and bolts through outside flanges, insure a tight, firm joint. The upper part forms a Steam Dome with smoke pipe passing through center, while the lower part forms the Fire Pot, with water space surrounding it and communicating with Steam Dome. Above fuel door and toward top of Fire Pot is a circular Flame Deflector which the flame strikes in rising from fire, thus being forced to pass around it before reaching smoke pipe. Dryer steam is secured by passing smoke pipe through Steam Dome.

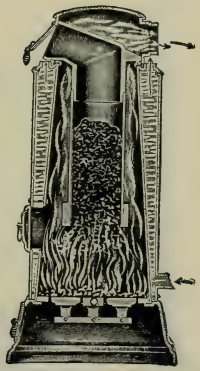
Sides of Fire Pot are somewhat corrugated, causing fire to burn cleaner. Boiler is tested at 60 pounds cold water pressure, and Safety Valve is set to blow off at about 15 pounds pressure.

FIXTURES AND FITTINGS.

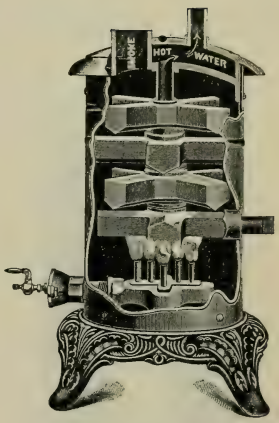
Each Boiler has an Ash Box, with shaking and dumping Grate and Shaker; Smoke Pipe Collar; Water Gauge; two Gauge Cocks; Safety Valve; Blow-off Valve; 5½ feet of iron pipe in two pieces with Shut-off Valve between, to carry steam from Boiler, to perform work required; Smoke Damper with Rod and Flame Deflector. The Safety Valve is combined with a Vacuum Valve to prevent the substances heated from backing up into the Boiler when steam goes down.



F-85. WILKS HEATER.



F-90. TABASCO HEATER.



F-95. PORCUPINE GAS HEATER.

WILKS WATER HEATERS, NOT SELF FEEDERS.—F-85.

SIZE OF HEATER . . . . . INCHES	10 x 15	10 x 18	12 x 24	12 x 30	14 x 30	14 x 36
HEATING CAPACITY PER HOUR . . . . . GALLONS	30	40	65	75	100	125
SIZE OF OPENINGS . . . . . INCHES	$\frac{3}{4}$	$\frac{3}{4}$	1	1	$1\frac{1}{4}$	$1\frac{1}{4}$
APPROXIMATE HEATING POWER, 2-IN. PIPE . . . . . FEET	50	60	100	125	150	175
FIRE SURFACE . . . . . SQUARE FEET	$2\frac{1}{2}$	$2\frac{8}{10}$	$4\frac{1}{2}$	$5\frac{1}{2}$	$6\frac{1}{2}$	$7\frac{1}{2}$
PRICE . . . . . EACH	20.00	21.00	25.00	26.50	30.00	32.00

WILKS WATER HEATERS, SELF FEEDERS.—F-85.

SIZE OF HEATER . . . . INCHES	16x30	16x36	20x30	20x36	20x42	24x36	24x42	30x42	30x48	36x42	36x48	42x42	42x48
HEATING CAPACITY PER HOUR . GALLONS	140	150	200	250	275	325	350	600	700	900	1000	1200	1300
SIZE OF OPENINGS . . . . . INCHES	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	2	2	2	3	3	3	3	3	3
APPROX. HEATING POWER, 4-IN. PIPE FT.	250	300	425	450	500	700	900	1200	1250	1450	1550	2000	2400
FIRE SURFACE . . . . SQUARE FEET	$8\frac{1}{2}$	10	11	12	14	$16\frac{1}{2}$	18	$24\frac{1}{2}$	28	$28\frac{1}{2}$	32	37	41
PRICE . . . . . EACH	57.50	60.00	72.00	75.00	80.00	105.00	110.00	130 00	135.00	185.00	195.00	215.00	225.00

TABASCO WATER HEATERS (MAGAZINE FEED).—F-90.

SIZE OF HEATER . . . . . INCHES	17x30	17x36	21x30	21x36	21x42	21x48	25x36	25x42	25x48	30x42	30x48	30x54
HEATING CAPACITY PER HOUR . . GALLONS	130	150	200	250	300	350	300	350	400	500	600	700
PRICE . . . . . EACH	78.00	82.00	93.00	100.00	107.00	113.00	143.00	150.00	158.00	171.00	180.00	188.00
SIZE FLOWS AND RETURNS . . . INCHES	2–$1\frac{1}{2}$	2–$1\frac{1}{2}$	2–2	2–2	2–2	2–2	2–2	2–2	2–2	2–3	2–3	2–3
FIRE SURFACE . . . . . SQUARE FEET	$8\frac{1}{2}$	11	$11\frac{1}{2}$	13	15	17	17	19	21	$24\frac{1}{2}$	28	33

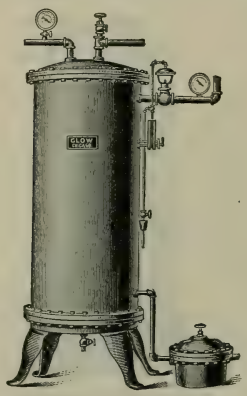
PORCUPINE HEATERS.—F-95.

For illuminating or natural gas. Diameter, 9 inches ; height, 20 inches. Price, each 16.00

THE CLOW AUTOMATIC WATER HEATER.

INSTANTANEOUS.

TO HEAT WATER
AT EVEN TEMPERATURE
IN
LARGE QUANTITIES
BY STEAM.



FOR HOTELS,
UNIVERSITIES, CLUBS,
ASYLUMS
AND ALL LARGE
BUILDINGS.

F-105. HEATER WITH TRIMMINGS.

The Clow Automatic Water Heater is instantaneous and is intended for use in Universities, Hotels, Hospitals, Laundries, Asylums, Natatoriums, Athletic Clubs or any building having a regular supply of high pressure steam and requiring a large amount of hot water for domestic or sanitary purposes.

The temperature of the water is automatically regulated by a regulating device so simple and accurate that a variation of two degrees in the temperature of the water will operate it, which enables this Heater to deliver the water evenly at any desired temperature at which it is set. Whether a small amount of water is being drawn from the Heater, or if the Heater is delivering water to its full capacity, the temperature will be the same.

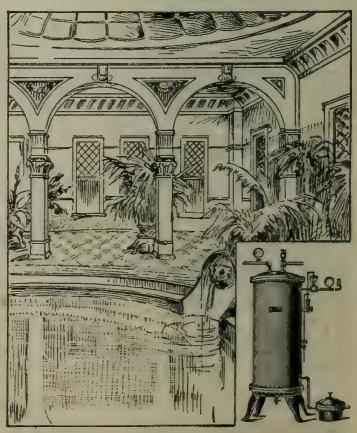
The Regulating Device consists of a Diaphragm Valve, through which the steam passes, and a Thermostat Valve, which is operated by the varying temperature, which opens or closes a vent, allowing the water from the Heater to pass into the small pipe leading to the Diaphragm of the valve. The latter is thus automatically opened or closed and the steam correspondingly turned on and off.

The Heaters are made of cast iron with flanged heads and bottoms which can be removed for cleaning. The steam coils on the inside are of seamless drawn brass tubing or copper. The No. 1 size has a single coil; the No. 2 a double coil; the No. 3 has three coils and the No. 4 four coils.

The advantages of the Clow Automatic Instantaneous Water Heater are its strength, durability, economy, reliability, its great efficiency, and the small space required for setting. The shell is tested to 300 pounds pressure and the coil to 500 pounds pressure. It is very economical in the use of steam, the water in the Heater being heated only as used.

NUMBER	1	2	3	4
DIAMETER . . . . . INCHES	18	22	26	30
HEIGHT OVER ALL . . . . . INCHES	66	72	75	78
CAPACITY PER HOUR . . . . GALLONS	1500	2500	4000	6500
COLD WATER INLET . . . . . INCHES	1½	2	2½	3
HOT WATER OUTLET . . . . . INCHES	1½	2	2½	3
STEAM INLET . . . . . INCHES	1½	2	2½	3
DRIP OUTLET . . . . . INCHES	¾	1	1¼	1½
COMPLETE AS SHOWN IN F-105 . EACH	250.00	375.00	500.00	625.00

The Cold Water Inlets and Hot Water Outlets are large enough for light water pressure; for heavy pressure they can be made smaller. The Steam Connections are of sufficient size for low pressure steam; for high pressure they can be reduced in size.

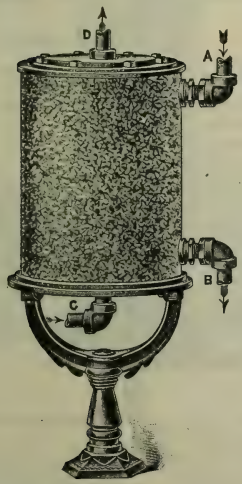


AS USED FOR HEATING PLUNGE BATHS.

CHAMPION WATER HEATERS.

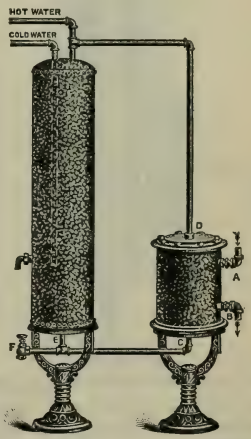
PATENTED.

OPERATED BY STEAM OR HOT WATER FROM THE HEATING SYSTEM.



F-111. CHAMPION WATER HEATER WITH STAND.

TESTED TO 100 POUNDS COLD WATER PRESSURE.

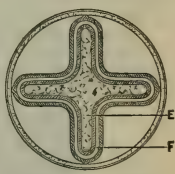


F-114. HEATER CONNECTED TO RANGE BOILER.

THE CHAMPION WATER HEATER is used to supply hot water for domestic purposes in residences or apartments warmed by steam.

The Heater consists of an outer cross-shaped Cast Iron Compartment enclosing another Chamber of similar shape. These are surrounded by a circular Galvanized Iron Jacket lined with Asbestos. Steam circulates through the inner compartment [E], see cross section, and heats water circulating in the space [F] between the two compartments. The Feed Pipe for steam from a Steam Boiler is indicated at [A], see F-111. [B] represents the Steam Return Pipe and [D] the Flow Pipe for hot water from the space between the two compartments to a Range Boiler or Tank. [C] indicates the Water Inlet Pipe. Heater can be supplied with or without a Stand. It should always be set above the water line of Steam Boiler with which it is connected. The cover being bolted on gives ready access to inside of Heater should the removal of lime formation ever become necessary.

THE CHAMPION renders unnecessary the placing of a Water Front, Pipe Coil, Dome or other water heating device in the combustion chamber of a Steam Boiler. Such devices affect unfavorably the burning of gases and always detract from the heating capacity of the Boiler, whether water is hot enough for domestic purposes or not, and they cause greater expenditure for fuel.



CROSS SECTION.

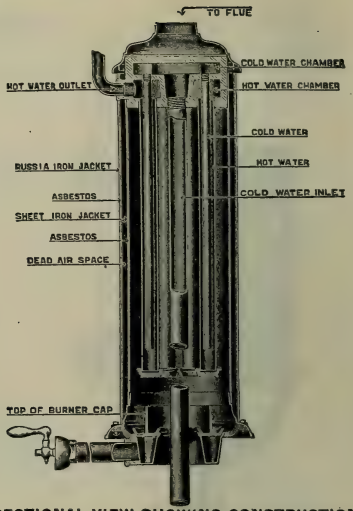
The CHAMPION has capacity to supply hot water for a residence or for three or four apartments. With from 1 to 5 pounds of steam it will heat 120 gallons of water in one hour, to the temperature ordinarily required at hot water faucets. A less quantity may be had by regulating Steam Valves. Where high steam pressures can be obtained, the Heater becomes an instantaneous one and a constant flow of hot water may be had.

Figure F-114 shows Heater connected to kitchen tank. By attaching hot water delivery to top of tank, as shown in cut, hot water can be drawn from Heater without heating contents of tank. When water ceases to be drawn, circulation through tank commences, and the tank then acts as a receiver for the water, which can be brought to any temperature required. It is desirable to have a tank or reservoir to receive the hot water. An ordinary kitchen tank, no matter how small, will answer the purpose. When Heater is connected, as shown in Figure F-114, with steam or hot water heating system, it requires no attention and furnishes an abundant supply of hot water at a cost so slight that it can scarcely be estimated.

DIAMETER	HEIGHT OF HEATER	HEIGHT OF STAND	WATER INLET AND OUTLET	STEAM INLET AND OUTLET	WEIGHT OF HEATER	WEIGHT WITH STAND	HEATER	STAND
12½ inches	20½ inches	20½ inches	1 inch	¾ inch	150 pounds	170 pounds	30.00	1.50



F-117. ECLIPSE ROUND WATER HEATER.



F-118. SECTIONAL VIEW SHOWING CONSTRUCTION.

ECLIPSE ROUND GAS WATER HEATERS.

NUMBER	5—Brass	6—Iron	7—Iron	10—Iron
SIZE SUPPLY PIPE . . . . . INCHES	½	½	1	1
FOR RANGE, BOILER CAPACITY . . . . . GALLONS	30 to 40	30 to 40	40 to 53	63 to 120
PRICE . . . . . EACH	24.00	10.00	13.00	24.00

The Number 7 can be used on smaller sized boilers, where larger quantities of water are wanted. The Number 5 can be furnished with polished copper jackets at an additional net cost of $3.75, or with polished copper jacket, all nickel plated, net, extra, $5.00.

The most satisfactory results are obtained by making connection, as shown in F-118, connecting the hot water outlet pipe from heater to the *top* of circulating boiler. In this manner hot water may be drawn five minutes after lighting the burner, and the entire contents of the boiler are heated as rapidly as with the ordinary connection at the side of boiler. This is a decided advantage, and we urge this method of connection.

A connection should also be made from the top of heater to the flue to carry off the products of combustion. The joints in flue pipe should be reversed from the position they are placed in connecting a coal or wood range. The *top* of each joint should lap to allow condensation to drip inside of pipe. We can furnish flue pipe and suitable connection in either cold rolled steel or planished iron, and prices will be made according to material selected and finish.



F-121. WATER FRONT.



F-123. WATER FRONT.

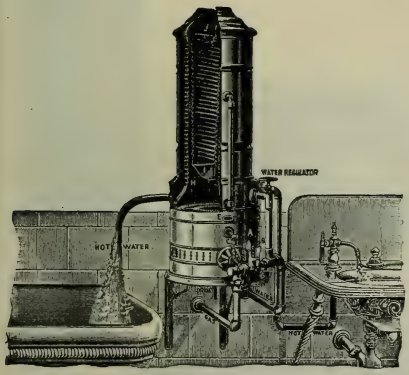
A COMPLETE LINE OF WATER FRONTS AND FIXTURES FOR CAST, STEEL, AND WROUGHT RANGES.

IN ORDERING STOVE REPAIRS, GIVE THE FOLLOWING INFORMATION:

1. Name. 2. Number or letter on Stove. 3. Maker's name. 4. Latest date of patent. 5. Wood, hard or soft coal. 6. Front, pouch or boiler feed. 7. Grates—flat or duplex. 8. Linings—brick or iron. 9. Plates—whether right or left, when facing hearth.

In Steel Ranges the oven-door side is the front of Range.

In ordering Water Fronts with Couplings, specify if "straight" or "bent." If not specified, the straight will be sent.



F-130. CRESCENT NUMBER 2.

Descriptive circular sent upon application.



F-133. CRESCENT NUMBER 6.

CRESCENT INSTANTANEOUS WATER HEATERS.

NUMBER 2. FOR BATH AND DOMESTIC USE. DIAMETER 12 IN., HEIGHT 36 IN., NICKEL PLATED	EACH	35.00
NUMBER 6. FOR BATH AND DOMESTIC USE. DIAMETER 12 IN., HEIGHT 30 IN., NICKEL PLATED	EACH	25.00
NUMBER 8. FOR BATH ONLY. DIAMETER 10½ IN., HEIGHT 30 IN., NICKEL PLATED	EACH	20.00

Nickel Plated Shelf and Brackets for Number 2, extra, $2.00; for No. 6, extra, $1.50; for No. 8, extra, $1.50.

Nickel Plated Vent Fittings:—Pipe, per foot, 50 cents; Collars, 30 cents; Elbows, 75 cents; Extension Thimbles, 4 to 8 inch, 90 cents; Vent Hoods, $1.25.



F-140. ACME NUMBER 12.

ACME INSTANTANEOUS WATER HEATERS.

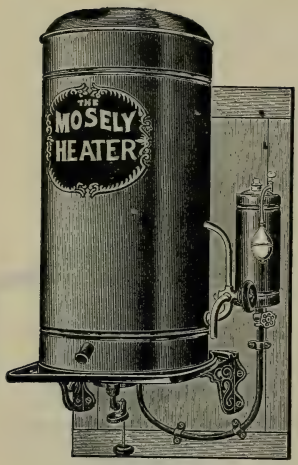
FINISH	Copper	Nickel Plated
F-140. FOR BATHS AND DOMESTIC USE. DIAM. 11 IN., HEIGHT 32 IN. . . EACH	25.00	28.00
F-144. FOR BATHS ONLY. DIAM. 12 IN., HEIGHT 28 IN. . . EACH	-----	20.00

In ordering, state kind of gas to be used.

Gasoline Regulator, extra, $2.00; Nickel Plated Shelf, $2.00; Floor Stand, $7.00; Nickel Plated Vent Pipe, per foot, 50 cents; Collars, 30 cents; Nickel Plated Vent Elbows, 70 cents.



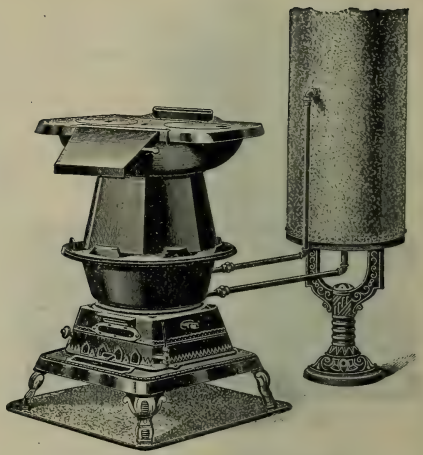
F-144. ACME NUMBER 15.



F-151. MOSELY WATER HEATER, FOR GASOLINE.

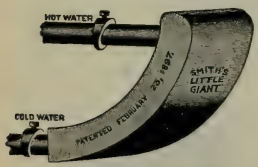
Style	A	B
Each	$18.75	$22.75

Style A, Galvanized Iron Tank, Enameled.
Style B, Copper Lacquered, with Enameled Top and Base.

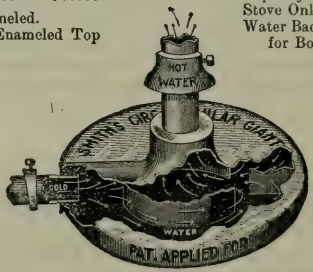


F-157. NEW IDEA LAUNDRY STOVE. ADAPTED TO BOILER CONNECTION.

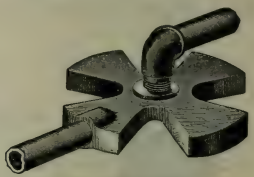
Number	1	2
Capacity for Laundry Irons	8	9
Stove Only, each,	$10.00	$14.00
Water Back, including Couplings for Boiler Connection, each,	7.00	7.00



F-161. LITTLE GIANT.



F-164. FOR STEEL DOME FURNACES.



F-166. FOR STOVES.

LITTLE GIANT WATER HEATERS, FOR FURNACES.—F-161.

NUMBER	0	1	2	3
NUMBER FEET OF RADIATION WILL HEAT	30	50	100	150
EACH	6.00	7.50	9.00	12.00

F-164.

DIAMETER, INCHES	14	16	18	20	22	24
NUMBER FEET OF RADIATION WILL HEAT	75	100	150	200	250	300
EACH	9.00	12.00	16.00	20.00	25.00	30.00

F-166. MALTESE WATER HEATERS.—12 inches diameter, each, $3.50
Two or more Maltese Heaters can be coupled together. Write for Descriptive Circular of these Heaters.



F-170. HORIZONTAL STEEL TANK



F-175. VERTICAL STEEL TANK.

STEEL TANKS (CLOW STANDARD TAPPING).

CAPACITY . . GALLONS	66	85	100	120	145	180	215	250	265	315	360	365	420	430	575
PLAIN . . . . . EACH	48.00	50.00	52.00	55.00	58.00	64.00	70.00	75.00	85.00	92.00	100.00	102.00	112.00	116.00	130.00
GALVANIZED . . EACH	60.00	63.00	67.00	72.00	78.00	90.00	98.00	105.00	-----	-----	-----	-----	-----	-----	-----
LENGTH . . . . FEET	5	5	5	5	6	5	6	7	5	6	5	7	8	6	8
DIAMETER . INCHES	18	20	22	24	24	30	30	30	36	36	42	36	36	42	42
WEIGHT . . POUNDS	220	250	280	320	360	480	540	590	675	780	800	810	880	1150	1400

COILS BUILT IN TANKS, EXTRA.

CAPACITY . . GALLONS	66	85	100	120	145	180	215	250	265	315	360	365	420	430	575
PLAIN COILS . . EACH	11.00	11.00	11.00	14.00	15.00	14.00	15.00	16.00	17.00	18.00	19.00	19.00	20.00	18.00	21.00
GALV. COILS . . EACH	13.00	13.00	13.00	16.00	17.00	16.00	17.00	18.00	19.00	21.00	22.00	22.00	23.00	21.00	24.00
SIZE 4-PIPE COIL .INCHES	1	1	1	1¼	1¼	1¼	1¼	1¼	1¼	1½	1½	1½	1½	1½	1½

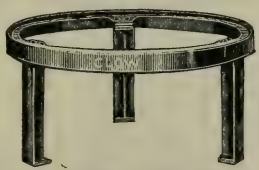
Vertical Tanks furnished at same price. Manholes, $10.00 extra, net.

Horizontal Tanks will always be sent unless otherwise specified.

For perfect hot water circulation we recommend that all steel tanks be tapped as per the Clow Standard. EXPLANATION:—C, Cold water supply to tank; D, Cold water supply to heater; E, Hot water from heater to tank; B, Hot water from tank to house supply. All openings threaded for Iron pipe as follows: Tanks, 145 gallons or less, 1¼ inch; 150 gallons and larger, 2 inch.



F-180. LOW TANK STAND.



F-182. HEAVY TANK STAND.

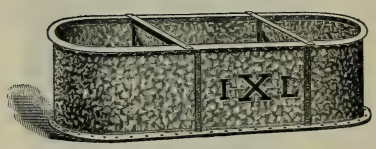


F-184. WROUGHT IRON HANGER.

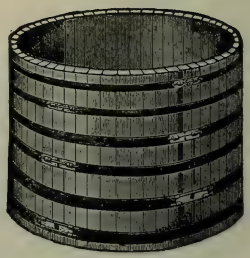
STEEL TANK STANDARDS AND HANGERS.

DIAMETER OF RING . . . . . INCHES	12	13	14	16	18	20	22	24	30	36	42
F-180. PLAIN . . . . . EACH	1.75	1.85	1.90	2.50	2.75	3.00	3.50	4.25	-----	-----	-----
F-180. GALVANIZED . . . . . EACH	3.00	3.10	3.20	3.75	4.50	5.25	5.75	7.25	-----	-----	-----
F-182. PLAIN . . . . . EACH	----	----	----	----	4.50	5.00	----	6.00	9.00	10.00	12.00
F-182. GALVANIZED . . . . . EACH	----	----	----	----	7.00	8.00	----	9.00	13.00	14.50	15.00
F-184. PLAIN . . . . . PER PAIR	6.50	----	6.80	7.00	7.50	8.00	8.80	9.80	12.00	15.00	-----

RESERVOIR TANKS.



F-188. OBLONG STEEL TANK.



F-192. ROUND WOOD TANK.

F-188.—OBLONG STEEL TANKS.

NUMBER	A 13	C 13	B 13	D 13	13	E 13	14	15	16	17	18	19	20
WIDTH . . . . . FEET	2	2	2	2	2	2	2	2½	2½	3	3	4	4
HEIGHT . . . . . FEET	2	2	2	2	2	2	2½	2	2½	2	2½	2	2½
LENGTH . . . . . FEET	4	5	6	7	8	10	8	8	8	8	8	8	8
CAPACITY . . . . BARRELS	3¾	4¾	5¾	6½	7½	9½	9½	9½	12	12	14	15	17
WEIGHT . . . . . POUNDS	80	93	100	112	123	150	145	135	150	141	166	181	195
PRICE . . . . . EACH	7.00	8.00	9.00	10.00	11.00	12.00	12.00	12.00	13.00	13.00	15.50	16.50	19.00

NUMBER	21	22	23	24	25	26	27	44	45	46	47	48	49
WIDTH . . . . . FEET	4	3	3	3	4	4	4	4	5	6	6	4	6
HEIGHT . . . . . FEET	3	2	2½	3	2	2½	3	2	2	2	2	5	4
LENGTH . . . . . FEET	8	10	10	10	10	10	10	16	16	8	10	10	10
CAPACITY . . . . BARRELS	23	14	18	21	19	24	29	30	38	23½	28½	47	56
WEIGHT . . . . . POUNDS	215	178	204	210	224	247	270	372	425	230	275	370	450
PRICE . . . . . EACH	23.00	15.50	19.50	21.50	20.00	24.00	27.00	30.00	35.00	24.00	27.00	39.00	48.00

These Tanks are made of No. 20 Galvanized Steel, with Steel Frames closely riveted and soldered.

F-192.—ROUND, WOOD RESERVOIR TANKS.

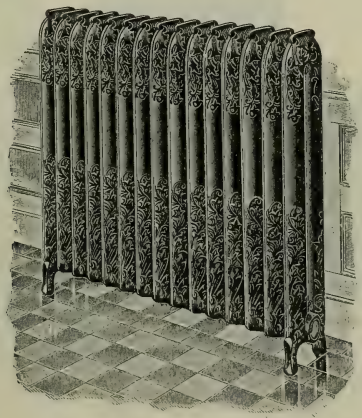
NUMBER	1	2	3	4	5	6	7	8
CAPACITY . . . . . BARRELS	15	20	25	35	40	50	60	80
HEIGHT . . . . . FEET	3	4	5	6	5	6	6	7
DIAMETER OF BOTTOM . . . . . FEET	5½	5½	5½	6	7	7	8	8
NUMBER OF HOOPS	3	4	5	6	5	6	6	7
APPROXIMATE WEIGHT . . . . . POUNDS	350	450	500	740	760	875	950	1075
MADE OF 1¼-INCH CYPRESS OR 2-INCH PINE . EACH	15.50	18.35	21.60	28.75	30.80	34.00	40.60	46.50
MADE OF 2-INCH CYPRESS . . . . . EACH	19.50	23.30	27.00	35.75	38.75	43.30	53.30	59.50

LOOSE COVERS, WITH TRAP DOORS, FOR ROUND, WOOD RESERVOIR TANKS.

SIZE—HEIGHT OF TANK . . . . . FEET	3	4	5	6
MADE OF 2-INCH CYPRESS . . . . . EACH	6.50	7.50	9.00	11.50
MADE OF 1¼-INCH CYPRESS OR 2-INCH PINE . . . . . EACH	5.50	6.50	7.00	10.00

CLOW BUENA RADIATORS.

STEAM OR HOT WATER. DIRECT OR DIRECT-INDIRECT.



F-205. TWO-COLUMN BUENA RADIATOR.

CLOW TWO-COLUMN BUENA RADIATORS.—F-205.

NUMBER OF SECTIONS	LENGTH INCHES	SQUARE FEET OF HEATING SURFACE					
		45 IN. HIGH	38 IN. HIGH	32 IN. HIGH	26 IN. HIGH	23 IN. HIGH	20 IN. HIGH
2	5	10	8	6⅔	5⅓	4⅔	4
3	7½	15	12	10	8	7	6
4	10	20	16	13⅓	10⅔	9⅓	8
5	12½	25	20	16⅔	13⅓	11⅔	10
6	15	30	24	20	16	14	12
7	17½	35	28	23⅓	18⅔	16⅓	14
8	20	40	32	26⅔	21⅓	18⅔	16
9	22½	45	36	30	24	21	18
10	25	50	40	33⅓	26⅔	23⅓	20
11	27½	55	44	36⅔	29⅓	25⅔	22
12	30	60	48	40	32	28	24
13	32½	65	52	43⅓	34⅔	30⅓	26
14	35	70	56	46⅔	37⅓	32⅔	28
15	37½	75	60	50	40	35	30
16	40	80	64	53⅓	42⅔	37⅓	32
17	42½	85	68	56⅔	45⅓	39⅔	34
18	45	90	72	60	48	42	36
19	47½	95	76	63⅓	50⅔	44⅓	38
20	50	100	80	66⅔	53⅓	46⅔	40
*PRICE PER FOOT		.41	.42	.46	.49	.53	.57

Width of Radiator, 7¼ inches. Approximate Shipping Weight, 6¾ pounds per square foot.

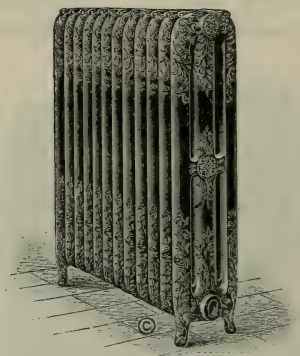
*For Curved or Column Radiators, add 58 cents per section for Steam; 92 cents per section for Water. For Corner Radiators add, per Radiator, Steam, $3.80; Water, $4.75. Special discounts on Curved, Round and Corner Radiators on application only.

For Tapping, see next page.

CLOW BUENA RADIATORS.

STEAM OR HOT WATER.

DIRECT OR DIRECT-INDIRECT



F-214. CLOW THREE-COLUMN BUENA RADIATORS.

NUMBER OF SECTIONS	LENGTH INCHES	SQUARE FEET OF HEATING SURFACE			
		39 IN. HIGH	33 IN. HIGH	27 IN. HIGH	21 IN. HIGH
2	5	12	10½	8½	6½
3	7½	18	15¾	12¾	9¾
4	10	24	21	17	13
5	12½	30	26¼	21¼	16¼
6	15	36	31½	25½	19½
7	17½	42	36¾	29¾	22¾
8	20	48	42	34	26
9	22½	54	47¼	38¼	29¼
10	25	60	52½	42½	32½
11	27½	66	57¾	46¾	35¾
12	30	72	63	51	39
13	32½	78	68¼	55¼	42¼
14	35	84	73½	59½	45½
15	37½	90	78¾	63¾	48¾
16	40	96	84	68	52
17	42½	102	89¼	72¼	55¼
18	45	108	94½	76½	58½
19	47½	114	99¾	80¾	61¾
20	50	120	105	85	65
*PRICE PER FOOT		.42	.46	.49	.57

Width of Radiator, 9¾ inches. Width across feet, 9¾ inches.

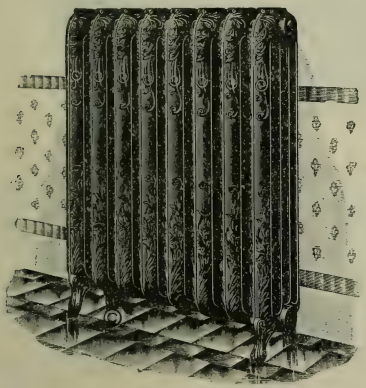
*For Curved or Column Radiators, add 58 cents per section for Steam; 92 cents per section for Water. For Corner Radiators add, per Radiator, Steam, $3.80; Water, $4.75. Special discounts on Curved, Round and Corner Radiators on application only.

TAPPING FOR CLOW BUENA RADIATORS.

HOT WATER SUPPLY AND RETURN		STEAM				
		ONE-PIPE WORK		TWO-PIPE WORK		
CAPACITY, SQUARE FEET	TAPPING INCHES	CAPACITY, SQUARE FEET	TAPPING INCHES	CAPACITY, SQUARE FEET	FEED INCHES	RETURN INCHES
40 and under	1	24 and under	1	48 and under	1	¾
40 to 72	1¼	25 to 60	1¼	49 to 96	1¼	1
More than 72	1½	61 to 100	1½	More than 96	1½	1¼
----------	----	More than 100	2	----------	----	----

CLOW BUENA RADIATORS.

STEAM OR HOT WATER.

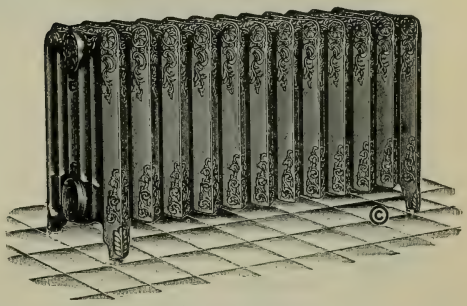


*FOUR-COLUMN
BUENA RADIATORS.—F-223.

NO. OF SECTIONS	LENGTH INCHES	SQUARE FEET OF HEATING SURFACE				
		42½ IN. HIGH	38¼ IN. HIGH	32½ IN. HIGH	26½ IN. HIGH	20¼ IN. HIGH
2	8½	19⅓	16	13⅓	10⅔	8
3	12½	29	24	20	16	12
4	16½	38⅔	32	26⅔	21⅓	16
5	20¾	48⅓	40	33⅓	26⅔	20
6	24¾	58	48	40	32	24
7	28¾	67⅔	56	46⅔	37⅓	28
8	32¾	77⅓	64	53⅓	42⅔	32
9	37	87	72	60	48	36
10	41	96⅔	80	66⅔	53⅓	40
11	45	106⅓	88	73⅓	58⅔	44
12	49	116	96	80	64	48
13	53	125⅔	104	86⅔	69⅓	52
14	57½	135⅓	112	93⅓	74⅔	56
15	61½	145	120	100	80	60
16	65½	154⅔	128	106⅔	85⅓	64
17	69½	164⅓	136	113⅓	90⅔	68
18	73½	172	144	120	96	72
19	77¾	183⅔	152	126⅔	101⅓	76
20	82	193⅓	160	133⅓	106⅔	80
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†PRICE PER FOOT		.41	.42	.46	.49	.57

*Width of Radiator, 8½ inches. Distance from floor to center of opening, 4 inches.

DIRECT OR DIRECT-INDIRECT.



‡SIX-COLUMN
BUENA OR WINDOW RADIATORS.—F-232.

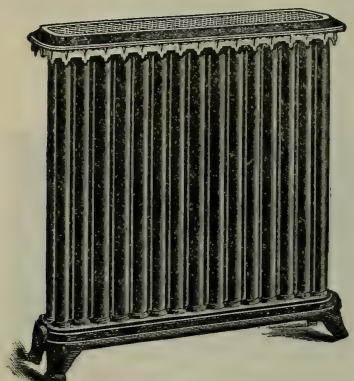
NO. OF SECTIONS	LENGTH INCHES	SQUARE FEET OF HEATING SURFACE			
		20 IN. HIGH	18 IN. HIGH	16 IN. HIGH	14 IN. HIGH
2	5	12	10⅔	9⅓	8
3	7½	18	16	14	12
4	10	24	21⅓	18⅔	16
5	12½	30	26⅔	23⅓	20
6	15	36	32	28	24
7	17½	42	37⅓	32⅔	28
8	20	48	42⅔	37⅓	32
9	22½	54	48	42	36
10	25	60	53⅓	46⅔	40
11	27½	66	58⅔	51⅓	44
12	30	72	64	56	48
13	32½	78	69⅓	60⅔	52
14	35	84	74⅔	65⅓	56
15	37½	90	80	70	60
16	40	96	85⅓	74⅔	64
17	42½	102	90⅔	79⅓	68
18	45	108	96	84	72
19	47½	114	101⅓	88⅔	76
20	50	120	106⅔	93⅓	80
22	55	132	117⅓	102⅔	88
24	60	144	128	112	96
25	62½	150	133⅓	116⅔	100
26	65	156	138⅔	121⅓	104
28	70	168	149⅓	130⅔	112
PRICE PER FOOT		.57	.58	.60	.64

‡Width of Radiator, 12¾ inches; across feet, 12¾ inches. Distance from floor to center of opening, 3 inches.

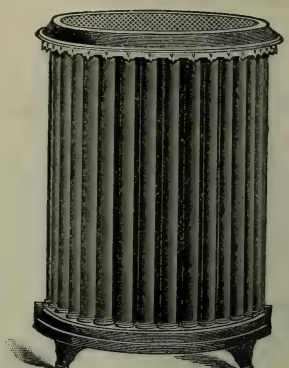
†For Curved or Column Radiators, add 58 cents per section for Steam; 92 cents per section for Water. For Corner Radiators add, per Radiator, Steam, $3.80; Water, $4.75. Special discounts on Curved, Round and Corner Radiators on application only.

Tapping, page 208.

IRON PIPE RETURN BEND RADIATORS.



F-241. .RECTANGULAR RADIATOR.



F-247. CIRCULAR RADIATOR.

RECTANGULAR, ONE ROW.—F-241.

WHOLE NUMBER OF TUBES AND SQUARE FEET OF SURFACE	6	8	10	12	16	20	24	28	32
LENGTH . . . . . INCHES	15½	19¾	24	28¼	36¾	45½	53¾	62¼	70¾
WIDTH . . . . . INCHES	6	6	6	6	6	6	6	6	6

TWO ROWS.

NUMBER TUBES IN EACH ROW	4	6	8	10	12	16	20	24	28	32
WHOLE NUMBER OF TUBES AND SQUARE FEET OF SURFACE	8	12	16	20	24	32	40	48	56	64
LENGTH . . . . . INCHES	11¼	15½	19¾	24	28¼	36¾	45¼	53¾	62¼	70¾
WIDTH . . . . . INCHES	6¾	6¾	6¾	6¾	6¾	6¾	6¾	6¾	6¾	6¾

THREE ROWS.

NUMBER TUBES IN EACH ROW	4	6	8	10	12	14	16	18	20	24	28	32
WHOLE NUMBER OF TUBES AND SQUARE FEET OF SURFACE	12	18	24	30	36	42	48	54	60	72	84	96
LENGTH . . . . . INCHES	11¼	15½	19¾	24	28¼	32½	36¾	39	45½	53¾	62½	70¾
WIDTH . . . . . INCHES	8½	8½	8½	8½	8½	8½	8½	8½	8½	8½	8½	8½

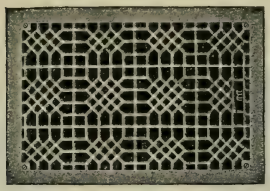
FOUR ROWS.

NUMBER TUBES IN EACH ROW	10	12	14	16	18	20	22	24	26	28	30
WHOLE NUMBER OF TUBES AND SQUARE FEET OF SURFACE	40	48	56	64	72	80	88	96	104	112	120
LENGTH . . . . . INCHES	24	28½	32½	36¾	39	45½	49½	53¾	58	62½	66½
WIDTH . . . . . INCHES	11	11	11	11	11	11	11	11	11	11	11

CIRCULAR.—F-247.

WHOLE NUMBER OF TUBES AND SQUARE FEET OF SURFACE . . .	18	36	54	84	120
OUTSIDE DIAMETER . . . . . INCHES	13	17	21	25¼	29

Radiators are tapped as follows:
Size of Inlet for Single Pipe—36 tubes or less, 1 inch ; 40 to 70 tubes, 1¼ inches ; 72 to 120 tubes, 1½ inches.
Size of Inlet and Outlet for Double Pipe—36 tubes and less, ¾x¾ ; 40 to 78 tubes, 1x¾ ; 80 to 120 tubes, 1¼x¾.



F-295.

REGISTERS, JAPANNED, BLACK OR WHITE.

SIZE OF OPENING . . . . . INCHES	6x6	6x8	6x9	6x10	6x12	7x10	8x8	8x10	8x12	8x15	9x12	9x14
REGISTERS . . . . . EACH	.90	1.00	1.05	1.05	1.20	1.10	1.05	1.10	1.25	2.10	1.40	2.05
WITHOUT VALVES. . . . . EACH	.75	.85	.90	.90	1.05	1.00	.95	1.00	1.15	1.90	1.30	1.90
FACES, ONLY . . . . . EACH	.45	.45	.55	.60	.70	.65	.60	.65	.75	1.05	.85	1.05
FLOOR BORDERS . . . . . EACH	.65	.65	.65	.70	.75	.70	.65	.70	.75	1.30	.85	1.25
WALL FRAME, 4 IN. DEEP . . EACH	.85	.90	.95	1.00	1.10	1.00	1.00	1.05	1.15	1.30	1.20	1.30
WALL FRAME, 2 IN. DEEP . . EACH	.50	.55	.60	.65	.75	.75	.65	.75	.85	1.00	.90	1.00

SIZE OF OPENING . . . . . INCHES	10x12	10x14	10x16	12x15	12x16	12x17	12x18	12x19	14x18	14x20	14x22	16x20
REGISTERS . . . . . EACH	1.60	2.10	2.65	2.95	3.45	3.70	3.95	4.20	5.20	5.60	6.00	7.15
WITHOUT VALVES. . . . . EACH	1.45	1.85	2.35	2.65	3.10	3.35	3.50	3.75	4.60	4.90	5.25	6.35
FACES, ONLY . . . . . EACH	.95	1.10	1.40	1.70	1.85	2.00	2.15	2.30	2.35	2.60	2.90	3.35
FLOOR BORDERS . . . . . EACH	.90	1.30	1.60	1.75	1.85	1.90	1.95	2.00	2.35	2.60	2.95	3.15
WALL FRAME, 4 IN. DEEP . . EACH	1.25	1.35	1.50	1.70	1.80	1.85	1.90	1.95	2.20	2.30	2.40	2.60
WALL FRAME, 2 IN. DEEP . . EACH	.95	1.00	1.15	1.25	1.30	1.35	1.40	1.45	1.70	1.80	1.90	....

REGISTER FACES ONLY.

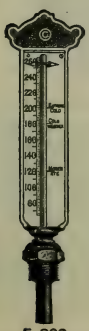
SIZE . . . . INCHES	16x24	18x24	20x20	20x24	20x26	21x29	24x24	24x27	24x30	24x32	24x36	27x27	27x38	30x30
EACH	3.95	4.75	4.10	5.10	5.60	6.20	6.20	7.00	8.30	9.30	11.00	8.60	13.50	10.50



F-307. RADIATOR BRUSH.

The Brush illustrated above is specially designed for use on Radiators, the shape being such that it will pass between the sections, cleaning surfaces which could not otherwise be reached. These Brushes are well made, and very serviceable.

Each 75



F-309.
STRAIGHT THERMOMETER.

HOT WATER THERMOMETER.

Will accurately indicate temperature of the water in a hot-water apparatus; unsurpassed for accuracy, sensitiveness and durability.

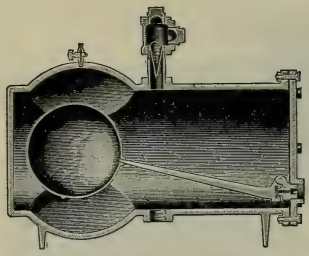
The glass bulb of each instrument is immersed in a Mercury bath, protected by a thin steel tube, so that there is little chance of injury.

Each Thermometer guaranteed; carefully packed in a separate wooden box.

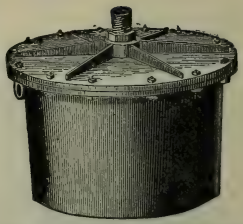
HOT WATER THERMOMETER, STRAIGHT . . . . . EACH	5.00
HOT WATER THERMOMETER, ANGLE (FOR USE ON RISERS, OR CIRCULATING PIPE). . . . . EACH	6.00



F-311.
ANGLE THERMOMETER.



F-353. IMPROVED STEAM TRAP.



F-357. STANDARD STEAM TRAP.

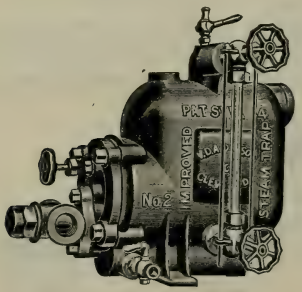
PATENT IMPROVED STEAM TRAPS.—F-353.

NUMBER	1	2	3
DRAINAGE CAPACITY, FEET OF 1-INCH PIPE	1500	4000	10000
EACH	25.00	35.00	65.00

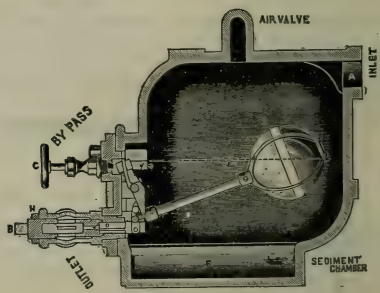
STANDARD STEAM TRAPS.—F-357.

DIAMETER INCHES	12	15	18
DRAINAGE CAPACITY, FEET OF 1-INCH PIPE	1500	3500	5000
EACH	23.00	36.00	54.00

F-353 Patent Improved Steam Traps will work satisfactorily under a pressure as high as 150 pounds.



F-368. ANDERSON STEAM TRAP.



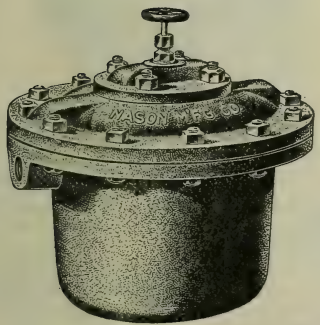
F-368. SECTIONAL VIEW.

THE ANDERSON IMPROVED STEAM TRAPS.—F-368.

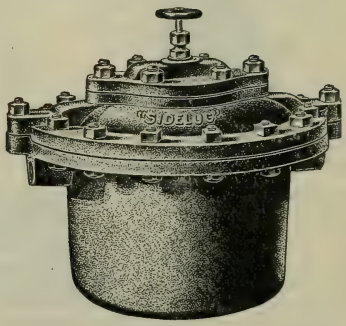
NUMBER	1	2	3	4	5	6
SIZE OF CONNECTIONS INCHES	½	¾	1	1¼	1½	2
MAXIMUM DISCHARGE PER MINUTE OF CONDENSATION POUNDS	3	5	8	14	20	30
GREATEST SURFACE TO WHICH IT SHOULD BE APPLIED SQUARE FEET	500	800	1350	2350	3500	5000
GREATEST 1-INCH PIPE SURFACE TO WHICH IT SHOULD BE APPLIED LINEAR FEET	1500	2500	4000	7000	10000	15000
PRICE EACH	20.50	22.50	28.00	35.00	50.00	70.00

When pressure below 30 pounds is to be used, it should be so stated in the order.

The valve seat can be removed from the outside without breaking a steam joint or connection. The sediment chamber (F) prevents sediment from getting into the valve.



F-372. NASON IMPROVED STEAM TRAP FOR PRESSURES UP TO 80 POUNDS.



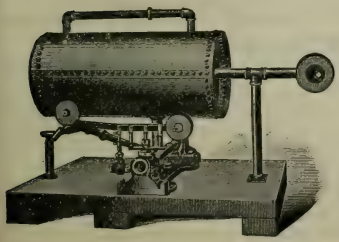
F-375. NASON SIDE-LUG STEAM TRAP. FOR PRESSURES FROM 80 TO 150 POUNDS.

NASON STEAM TRAPS.—F-372 and F-375.

NUMBER OF TRAP	1	2	3	4	5
SIZE OF PIPE CONNECTIONS . . . . . INCHES	¼	¾	1	1¼	1½
WEIGHT OF NASON IMPROVED . . . . . POUNDS	40	80	113	176	336
WEIGHT OF SIDE-LUG TRAP . . . . . POUNDS	47	92	125	212	343
GREATEST SURFACE TO WHICH THEY SHOULD BE APPLIED . . . . . SQUARE FEET	350	900	1400	2000	3500
GREATEST 1-INCH PIPE SURFACE TO WHICH THEY SHOULD BE APPLIED . . . . . LINEAR FEET	1050	2700	4200	6000	10500
MAXIMUM DISCHARGE OF WATER PER MINUTE . . . . . POUNDS	2	5	8	12	20
F-372. NASON IMPROVED . . . . . EACH	16.00	20.00	27.50	42.50	70.00
F-375. SIDE LUG . . . . . EACH	16.85	21.30	29.25	45.50	74.75

In ordering traps always state at what pressure they are to work.

The side-lug has reinforced joints at the point of outlet and inlet where steam posts pass from pots to cover, making leaks near these places impossible, there being no possibility of the gaskets blowing out. Note also the number of bolts in the covers, which make these traps amply equal to high pressure work.

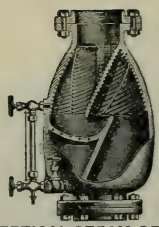


F-378. MOORHEAD STEAM TRAP.

MOORHEAD RETURN STEAM TRAPS.—F-378.
ESPECIALLY ADAPTED FOR GREENHOUSES.

NUMBER	1	2	3	4
SIZE OF DRUM . . . . . INCHES	7x24	12x30	14x36	14x36
PIPE CONNECTIONS . . . . . INCHES	1	1¼	1½	2
CAPACITY, DIRECT RADIATION . SQ. FEET	4000	8000	15000	20000
CAPACITY, 1-INCH PIPE . . . . FEET	12000	24000	45000	60000
LINEAR FEET OF PIPE	2000	4000	7500	10000
PRICE . . . . . EACH	75.00	135.00	175.00	225.00

The trap works as follows: The weight of the accumulated condensation in the tank overbalances the counter-weight, tilts the tank over, opens a valve which admits steam to the surface of the water in the tank, thus equalizing the boiler pressure, and the condensation runs into the boiler by gravity. As soon as empty, the tank tilts back to its normal position to again refill.



F-382. VERTICAL STEAM SEPARATOR.



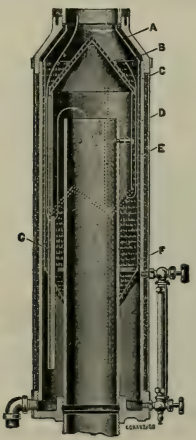
F-384. HORIZONTAL STEAM SEPARATOR.

AUSTIN SEPARATORS. (STANDARD PATTERN FOR LIVE AND EXHAUST STEAM.)—F-382 and F-384.

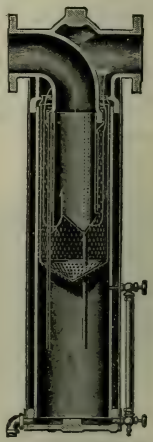
SIZE . . . . . INCHES	1½	2	2½	3	3½	4	4½	5	6	7	8	10	12
F-382. VERTICAL. . . EACH	30.00	40.00	45.00	50.00	60.00	70.00	75.00	80.00	110.00	125.00	160.00	220.00	250.00
F-384. HORIZONTAL . EACH	30.00	40.00	45.00	50.00	60.00	70.00	75.00	80.00	110.00	125.00	160.00	220.00	250.00

Prices include connecting Flanges, Water Gauge, Nipple and Straight-way Valve.

In ordering, state if Horizontal or Vertical is wanted, and if for Exhaust or Live Steam. For Table of Dimensions of Vertical or Horizontal, write for special circular.



F-388. VERTICAL.
SWEET'S DIRECT LIVE STEAM SEPARATOR.



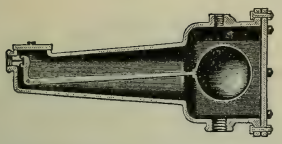
F-391. HORIZONTAL.
DIRECT EXHAUST STEAM OIL SEPARATORS.

DIRECT STEAM SEPARATORS.—F-388 and F-391.

SIZE . . . . . INCHES	1	1½	2	2½	3	3½	4	4½	5	6
F-388. VERTICAL OR HORIZONTAL . . . EACH	16.00	24.00	40.00	46.75	53.50	63.00	73.50	86.50	100.00	120.00
F-391. VERTICAL OR HORIZONTAL . . . EACH	12.00	18.00	30.00	35.00	40.00	47.00	55.75	66.50	75.00	90.00

SIZE . . . . . INCHES	7	8	9	10	12	14	16	18	20	------
F-388. VERTICAL OR HORIZONTAL . . . EACH	153.50	166.75	240.00	300.00	433.50	533.50	800.00	1033.50	1367.00	------
F-391. VERTICAL OR HORIZONTAL . . . EACH	115.00	125.00	180.00	225.00	325.00	------	------	------	------	------

Write for special circular, giving details of construction, connections and operation.



F-401. AUTOMATIC WATER FEEDER.

PRICE . . . . . EACH	20.00



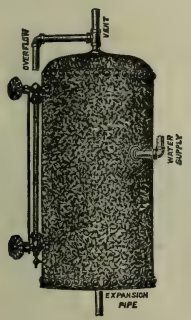
F-405. LOW PRESSURE DAMPER REGULATOR.

PRICE . . . . . EACH	10.00

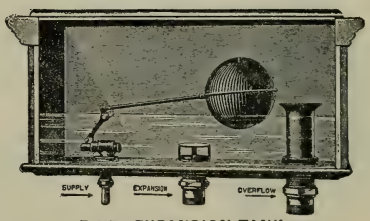


CLARKE DAMPER REGULATORS.—F-410.

NUMBER	1	2	3
EACH	10.00	15.00	25.00
CAPACITY . . . . . HORSE-POWER	5	20	30 to 500



F-414. EXPANSION TANK.



F-417. EXPANSION TANK.

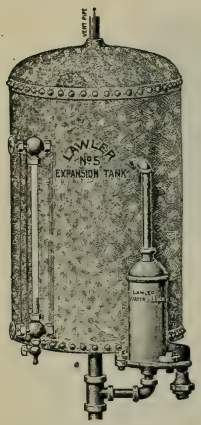
GALVANIZED IRON EXPANSION TANKS.—F-414.

CAPACITY . . . . . GALLONS	5½	8	10	12	15	18	20	24	26	32	42	66
INCLUDING GAUGE . . . . . EACH	8.50	10.00	10.50	11.00	11.50	12.00	15.00	15.50	16.50	17.50	19.00	33.50
HEIGHT . . . . . INCHES	20	25½	20	24	30	36	30	36	30	36	48	60
DIAMETER . . . . . INCHES	9	10	12	12	12	12	14	14	16	16	16	18
SIZE OF GAUGE GLASS . . . INCHES	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12	⅝x12
APPROXIMATE WEIGHT . . POUNDS	28	31	35	40	46	53	60	66	70	82	102	154

WOOD EXPANSION TANKS.—F-417.

PLAIN OAK, NO VARNISH . . . . . EACH	8.00
PLAIN OAK, VARNISHED, ROUND CORNERS . . . . . EACH	9.30

Prices include Expansion and Overflow Couplings with Iron Pipe Threads.

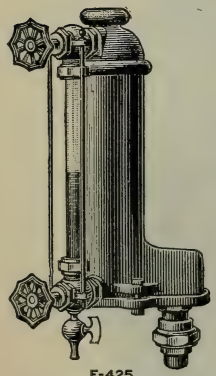


F-421.

LAWLER AUTOMATIC EXPANSION TANK.—F-421.

NUMBER	0	1	2	3	4	5	6	7	8
SIZE	10x20	12x20	12x24	12x30	12x36	14x30	14x36	16x30	16x36
CAPACITY IN GALLONS	8	10	12	15	18	20	24	26	32
SQUARE FT. OF RADIATING SURFACE, TANK WILL CARRY	260	350	450	525	650	750	850	900	1100
COMPLETE WITH FEEDER AND WATER GAUGE	18.50	19.50	20.25	20.75	21.50	24.25	25.00	26.00	27.00

With this arrangement of Automatic Expansion tank there is absolutely no danger from burning the boiler, which is often the result of neglecting to keep the system filled. Further, there is no escape of steam or evaporation from the hot water escaping through the house.



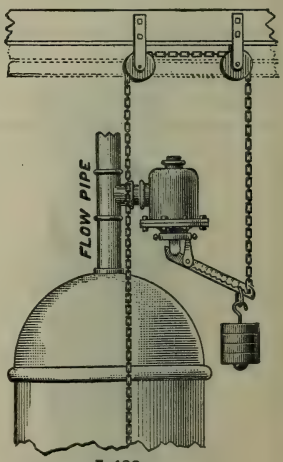
F-425.
NO. 6 WATER FEEDER.

LAWLER AUTOMATIC WATER FEEDER.

FOR LOW-PRESSURE STEAM BOILERS AND HOT WATER HEATING PLANTS.

When used on Low-Pressure Steam Boilers, the ordinary water columns may be dispensed with, as this is not only an Automatic Feeder, but a water column with water gauge. It is also largely used on hot water heating plants, placed above the highest radiator, having an overflow pipe extending from the top connection to any closet tank or open plumbing fixture, and entirely dispensing with the use of expansion tank.

PRICE	25.00



F-428.
HOT WATER REGULATOR.

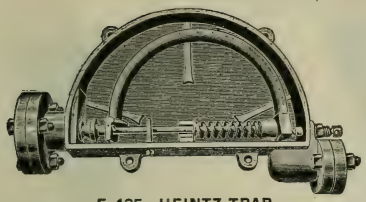
LAWLER HOT WATER REGULATOR.—F-428.

FOR AUTOMATICALLY CONTROLLING THE DRAFT DOORS OF HOT WATER BOILERS.

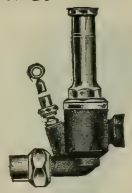
This Hot Water Damper Regulator will operate the draft doors of a hot water heater at any temperature of the water from about 120 degrees up, by changing the position of the weights on lever. Special points about this Regulator which should command the attention of the practical Hot Water fitter, is that the device has but one connection to be connected to the heating apparatus, which is a 2-inch close nipple connected to a tee on the flow pipe, thus doing away with a return connection, besides in no way interfering with the flow of water through the main flow pipe of heater. There is nothing delicate about it, so that it is not liable to get out of order, and the next special point is that its price is low. This machine has been on the market for several years and has proved to be a success and is highly appreciated by those who have used them.

PRICE	25.00

THERMOMETRIC VALVES OR STEAM TRAPS.



F-435. HEINTZ TRAP.



F-438. MARSH TRAP.

HEINTZ STEAM TRAPS OR THERMOMETRIC VALVES.—F-438.

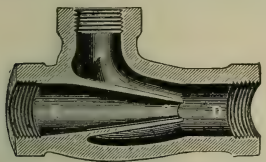
SIZE OF VALVE . . . INCHES	⅛	¼	½	¾	1	1¼	1½	2
SIZE OF CONNECTION . . . INCHES	½	¾	¾	1	1¼	1½	1½	2
CAPACITY AT 194° TEMPERATURE AND 100 POUNDS PRESSURE . . GALLONS PER MINUTE	-----	-----	15	31	60	94	135	240
IRON . . . EACH	8.00	12.00	18.50	32.50	45.00	60.00	75.00	105.00
BRASS . . . EACH	10.65	16.00	24.75	43.50	60.00	80.00	100.00	140.00
NICKEL . . . EACH	11.50	17.00	26.00	45.00	62.50	85.00	108.00	150.00

For details of construction and application, see special circular.

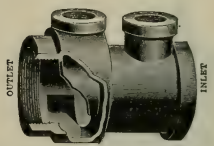
MARSH STEAM TRAPS OR THERMOMETRIC VALVES.—F-438.

NUMBER . . .	1	2	3
SIZE OF CONNECTIONS . . . INCHES	½x½	¾x½	1x½
SQUARE FEET OF HEATING SURFACE WILL TAKE CARE OF . . . APPROXIMATE	250	300	500
BRASS . . . EACH	5.00	7.50	10.00

Write for circular giving full description.



F-445. McDANIEL'S SUCTION TEE.



F-450. EUREKA CIRCULATION FITTING.

McDANIEL'S PATENT SUCTION TEE.—F-445.

SIZES . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	5	6
REGULAR TEES . . . EACH	.80	1.00	1.25	1.50	2.00	2.50	3.00	-----	-----	-----	-----
EXTRA HEAVY TEES . . . EACH	----	2.00	2.50	3.00	4.00	6.00	9.00	12.00	15.00	24.00	34.00

Wherever two returns back up on another, it will stop the same—by using the shortest one, getting its steam first at B, and the other and weaker one at A, as by this means the stronger one will act as an ejector and cause the weaker one to circulate freely. All can then be connected at D and carried on to the main waste or return. The Suction Tee can be used to advantage in making all connections on heating jobs. Where condensation returns to the boilers, put it on wherever two returns come together.

EUREKA COMBINATION CIRCULATION FITTING.—F-450.

FOR ONE-PIPE HOT-WATER WORK.

SIZE OF MAIN . . . INCHES	2	2½	3	3½	4	4½	5	6
LENGTH OVER ALL . . . INCHES	8⅛	8⅛	9¼	9¼	9¼	9¼	9¼	9¼
OUTLETS, CENTER TO CENTER . . . INCHES	4½	4½	4½	4½	4½	4½	4½	4½
PRICE . . . EACH	.90	1.30	1.50	1.90	2.20	3.20	3.70	4.90

The Hot Water is taken from the top of the fitting, and passing through the radiators is returned through an especially devised channel in the fitting in such a manner that it flows to the cool strata in the lower side of the pipe.



F-455. LYMAN.



F-460. STURTEVANT.



F-460. SECTIONAL VIEW.

LYMAN EXHAUST HEAD, FOR END OF PIPE ABOVE ROOF.—F-455.

PIPE SIZE	1	1½	2	2½	3	3½	4	4½	5	6	8	9	10	12	16
EXHAUST HEADS . EACH	20.00	20.00	25.00	25.00	30.00	30.00	40.00	40.00	50.00	60.00	90.00	105.00	125.00	150.00	250.00
EXHAUST PIPE . PER FOOT	-----	-----	-----	-----	.35	-----	.50	-----	.65	.80	1.20	1.40	1.70	2.20	3.50
ELBOWS . . . . EACH	-----	-----	-----	-----	1.50	-----	2.00	-----	2.80	4.00	6.50	8.50	9.50	13.00	17.00

STURTEVANT EXHAUST HEADS.—F-460.

PIPE SIZE . . . . . INCHES	1 or 1½	2 or 2½	3 or 3½	4 or 4½	5	6	7	8	10	12	14	16
WEIGHT . . . . . POUNDS	17	26	45	69	77	110	135	200	260	365	425	575
EXHAUST HEAD . . . . EACH	20.00	25.00	30.00	40.00	50.00	60.00	75.00	90.00	125.00	150.00	200.00	250.00

THE STURTEVANT HEAD separates water and oil from exhaust steam by centrifugal force. No baffle plates to rattle loose. No back pressure on the engine. Sizes above 5-inch, standard flanges.



F-470. GLOBE VENTILATOR.



F-465. LOCK SEAM PIPE.



F-472. STAR VENTILATOR.

LOCK SEAM GALVANIZED PIPE AND FITTINGS, NOT FOR PRESSURE.—F-465.

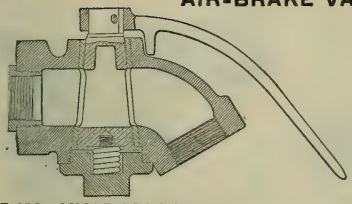
SIZE . . . . . INCHES	1½	2	2½	3	4	5	6
PER FOOT	.12	.14	.17	.19	.25	.30	.38
ADJUSTABLE ELBOWS . . . . . EACH	.20	.20	.25	.30	.40	.55	.70
ONE-QUARTER AND ONE-EIGHTH BENDS . . . . . EACH	.18	.18	.22	.24	.36	.50	.64
TEES AND Y'S . . . . . EACH	.25	.30	.40	.45	.60	.78	.96
COUPLERS . . . . . EACH	.18	.18	.22	.24	.36	.50	.64

GLOBE AND STAR VENTILATORS.—F-470 and F-472.

SIZE . . . . . INCHES	2	3	4	5	6	7	8	10	12	14	16	18	20	24
CAPACITY . . INCHES	4	7	12	19	27	37	48	75	108	147	192	232	300	432
PRICE . . . . . EACH	1.00	1.50	1.75	2.50	3.40	4.00	4.65	5.75	6.75	13.00	20.00	27.00	33.00	40.00

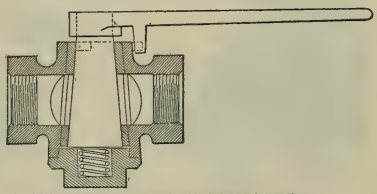
By estimating the number of square inches in your Flue, you can decide what size Ventilator to order.

AIR-BRAKE VALVES AND FITTINGS.



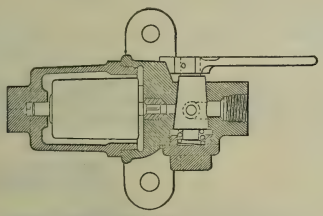
F-480. ANGLE COCK COMPLETE.

1¼-inch . . . . . each, 2.50
Extra Handles . . . . . each, .15



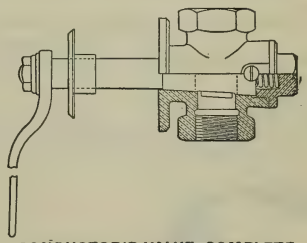
F-483. CUT-OUT COCK COMPLETE.

1¼-inch . . . . . each, 2.00
Extra Handles . . . . . each, .15



F-488. PRESSURE RETAINING VALVE.

⅜-inch . . . . . each, 1.20



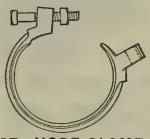
F-491. CONDUCTOR'S VALVE, COMPLETE.

¾-inch . . . . . each, 2.00



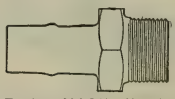
F-494. RELEASE VALVE.

½-inch . . . . each, 1.35



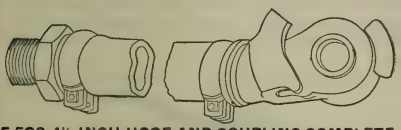
F-497. HOSE CLAMP.

Malleable Iron, 1¼-inch . each, .08



F-500. HOSE NIPPLE.

Malleable Iron, 1¼-inch . each, .18



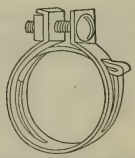
F-503. 1¼-INCH HOSE AND COUPLING COMPLETE.

Hose 22 inches long. Price on application.



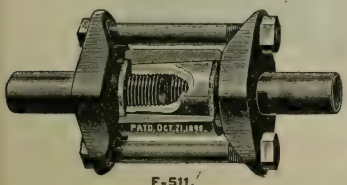
F-506. RESERVOIR DRAIN COCK.

¼-inch . each, .40



F-509. RUST-PROOF HOSE CLAMP.

Size, inches . . .	1	1¼
Per dozen	1.35	1.50



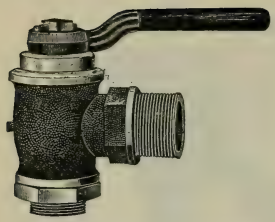
F-511.

CLIMAX COUPLING.—F-511.

FOR AMMONIA AND AIR.

SIZE . IN.	¼	⅜	½	¾	1	1¼	1½	2	2½	3
EACH . . .	.45	.55	.65	.75	.90	1.05	1.30	1.75	2.55	3.45

Carefully tested to a pressure of 300 pounds per square inch.



F-515. IRON LARD TANK COCK.



F-518. RAIL HANGER.



F-521. PERFECTION GATE.

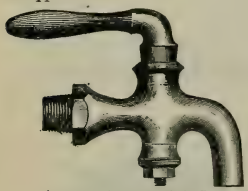
ALL IRON LARD TANK COCK.—F-515.

2-INCH . . . . . EACH	10.00

ALL IRON PERFECTION GATES.—F-521.

SIZE . . . . . INCHES	1	1¼	1½	2	3
PER DOZEN	14.00	16.50	20.00	28.00	36.00

F-518. Rail Hangers for Packing House use are made both in Cast Iron and Pressed Steel in any size or style. Prices on application.



F-525. IRON FAUCET.



F-528. IRON FILTER PRESS COCK.



F-531. IRON RENDERING TANK COCK.

IRON FAUCETS.—F-525.

SIZE. . . . . INCHES	½	¾	1
ALL IRON . . . . . PER DOZEN	16.00	23.00	35.00

IRON FILTER PRESS COCKS.—F-528.

½-INCH . . . . . EACH	1.50

Lard Filter Press Cocks also made in Brass, same price.

IRON RENDERING TANK COCKS—F-531.

EACH	1.00



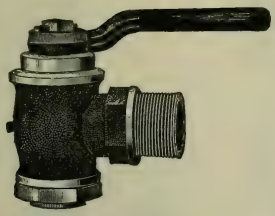
F-535. HOG WASH VALVE.

SIZE. . . . . INCHES	1	1½
BRASS. . . . . EACH	8.00	15.00

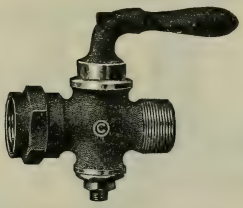


F-538. BRASS HOG WASH VALVE, WITH LEVER.

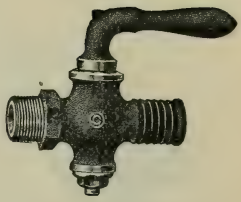
SIZE . . . . . INCHES	1	1½
BRASS. . . . . EACH	10.00	18.00



F-545. LARD TANK COCK.



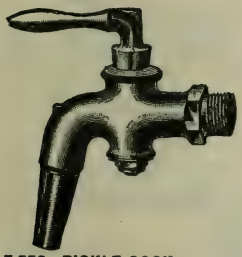
F-550. BRINE COCK, IRON PIPE.



F-552. BRINE COCK, FOR HOSE.

BRASS LARD TANK COCKS AND BRINE COCKS.—F-545, F-550 and F-552.

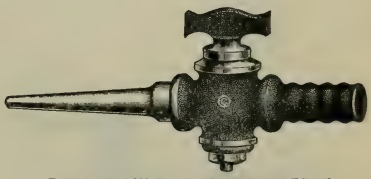
SIZE . . . . . INCHES	¾	1	1¼	1½	2
F-545. LARD TANK COCKS . . . . . EACH	----	----	----	12.00	16.00
F-550 AND F-552. BRINE COCKS . . . . . EACH	1.75	2.50	4.00	-----	-----



F-558. PICKLE COCK.



F-560.
HYDRAULIC AIR COCK.
Finished Brass. Each, $1.50



F-565. PICKLE COCK AND NOZZLE.

ROUGH BRASS . . . . . EACH	3.50

ROUGH BRASS . . . . . EACH	3.50



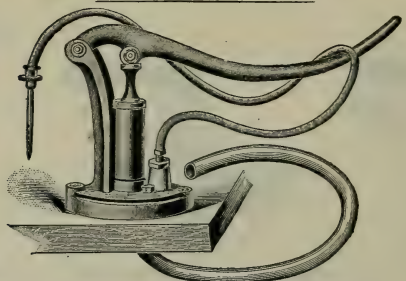
F-570. FOUNTAIN BRUSH COCK.



F-572. FOUNTAIN BRUSH.

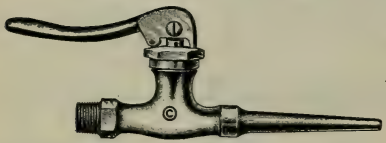
FOUNTAIN BRUSH COCKS . . . . . EACH	2.00

FOUNTAIN BRUSHES . . . . . EACH	2.00



F-580. IMPROVED HAM CURING PUMP.

Each 10.00



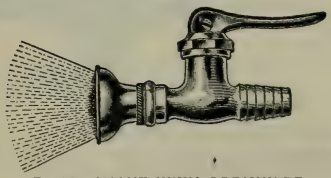
F-584. CLOW LIVER NEEDLE AND VALVE

Nickel Plated . . . . . each, 6.00



F-585. CLOW STEEL PICKLING NEEDLE.

Size . . . . . Inches,	$\frac{3}{8}$	$\frac{1}{4}$
Standard, Nickel Plated . . . each,	2.00	2.00
Extra Heavy, Nickel Plated . . each,	3.00	3.00



F-590. VALVE WITH SPRINKLER.

Finished Brass . . . . . each, 2.50
Nickel Plated . . . . . each, 3.00

FOR SPRAYING MEAT AND FOR USE IN LAUNDRIES.

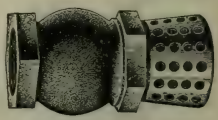


F-592. VALVE WITH SPRINKLER.

Finished Brass . . . . . each, 2.50
Nickel Plated . . . . . each, 3.00



F-600. FOR LEAD PIPE.



F-602. FOR IRON PIPE.

BRASS FOOT VALVES FOR ACIDS.—F-600 and F-602.

SIZE . . . . . INCHES	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4
F-600. FOR LEAD PIPE . . . . . EACH	8.35	8.70	10.25	12.35	23.00
F-602. FOR IRON PIPE . . . . . EACH	7.50	7.50	8.50	10.00	19.00

BRASS GAS FIXTURE FITTINGS.



G-1. TWO-LIGHT PENDANT.



G-2. BRACKET COCK.

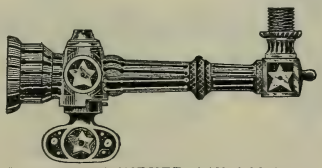


G-3. UNIVERSAL BRACKET.

SIZE . . . . . INCHES	⅜ x ⅜	⅜ x ¼	⅜ x ⅛	¼ x ⅛
G-1 . . . . . PER DOZEN	----	9.10	9.10	8.45
G-2 . . . . . PER DOZEN	9.10	8.45	8.15	7.80
G-3 . . . . . PER DOZEN	13.00	12.35	12.05	11.70



G-4. ELBOW BURNER.



G-5. ELBOW BURNER, 4 IN. LONG.



G-6. ELBOW PENDANT.

SIZE . . . . . INCHES	½	⅜	¼	⅛	---
G-4 . . . . . PER DOZEN	6.20	5.20	4.55	4.25	-----
G-5 . . . . . PER DOZEN	----	8.25	8.25	----	-----
SIZE . . . . . INCHES	⅜ x ⅜	⅜ x ¼	⅜ x ⅛	¼ x ¼	¼ x ⅛
G-6 . . . . . PER DOZEN	5.85	5.20	5.20	5.20	4.90



G-7. MIDDLE OR TOP SWING.



G-8. UNIVERSAL PENDANT.



G-9. UNIVERSAL SWING.

SIZE . . . . . INCHES	⅜ x ⅜	⅜ x ¼	⅜ x ⅛	¼ x ¼	¼ x ⅛	⅛ x ⅛
G-7 . . . . . PER DOZEN	6.20	5.55	5.20	4.90	4.55	4.25
G-8 . . . . . PER DOZEN	10.20	9.75	9.45	9.10	8.80	8.80
G-9 . . . . . PER DOZEN	9.10	8.80	8.80	8.45	8.15	7.80



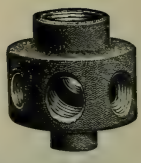
G-10.
ELBOW PENDANT.



G-13.
STIFF JOINT.



G-14.
PILLAR COCK.



G-23.
MAL. CHANDELIER BODY.

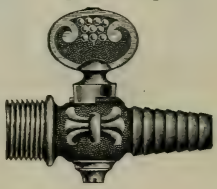
SIZE . . . . . INCHES	⅛x½	¼x⅜	¼x½	⅜x⅜	⅜x½	⅜x⅝	½x½	½x⅝	½x¾
G-10 . . . . . PER DOZEN	----	----	----	----	5.20	5.20	5.20	4.90	4.90
G-13 . . . . . PER DOZEN	3.25	2.60	2.60	1.95	1.85	1.55	1.50	1.40	1.40

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾
G-14 . . . . . PER DOZEN	3.90	4.25	4.55	5.20	6.50

G-23. Chandelier Bodies, see page 93 for prices.



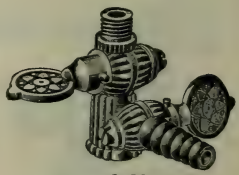
G-25.
FEMALE HOSE COCK.



G-26.
MALE HOSE COCK.



G-27.
INDEPENDENT COCK.

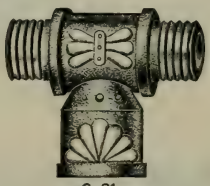


G-28.
DOUBLE HOSE COCK.

SIZE . . . . . INCHES	⅛	¼	⅜	½
G-25 . . . . . PER DOZEN	4.25	4.55	4.90	5.25
G-26 . . . . . PER DOZEN	4.55	4.90	5.20	5.55
G-27 . . . . . PER DOZEN	5.50	6.00	6.50	----
G-28 . . . . . PER DOZEN	----	----	15.00	----



G-30.
BRACKET BODY.



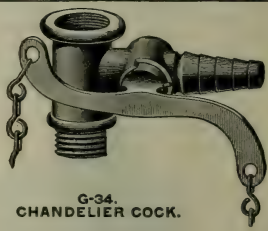
G-31.
PILLAR BODY.



G-32.
SIDE NOZZLE.



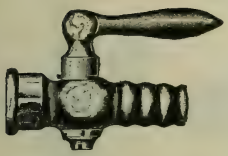
G-33.
STRAIGHT NOZZLE.



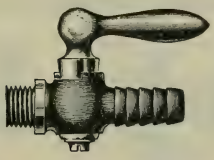
G-34.
CHANDELIER COCK.

SIZE . . . . . INCHES	⅜	¼	⅛
G-30 . . . . . PER DOZEN	5.00	----	----
G-31 . . . . . PER DOZEN	5.20	----	----
G-32 . . . . . PER DOZEN	1.95	1.65	1.00
G-33 . . . . . PER DOZEN	2.30	1.65	1.00
*G-34 . . . . . PER DOZEN	16.00	----	----

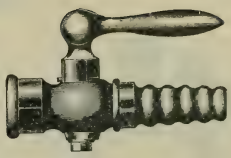
*Price includes two chains, each three feet long. These Cocks are used when there is no side outlet or bracket, and direct service can only be had from chandelier.



G-39.
HOSE END COCK. FEMALE.

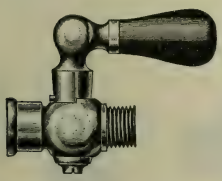


G-40.
HOSE END COCK. MALE.

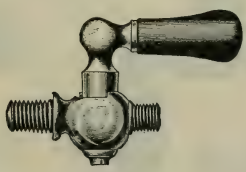


G-41.
HOSE COCK. WITH LOOSE NIPPLE.

SIZE . . . . . INCHES	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
G-39. FINISHED BRASS . . . . . PER DOZEN	6.00	6.60	7.80	------
G-39. WITH WOOD HANDLE. . . . . PER DOZEN	6.60	7.20	------	------
G-40. FINISHED BRASS . . . . . PER DOZEN	7.20	7.80	------	------
G-40. WITH WOOD HANDLE. . . . . PER DOZEN	9.00	9.60	------	------
G-41 . . . . . PER DOZEN	7.50	8.25	9.50	------



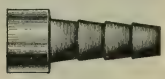
G-42.
WOOD HANDLE GAS COCK. M. & F.



G-43.
WOOD HANDLE GAS COCK. MALE.

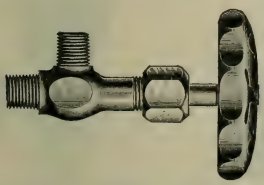


G-44.
MALE HOSE END NIPPLE.

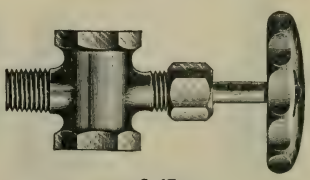


G-45.
FEMALE HOSE END NIPPLE.

SIZE . . . . . INCHES	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}\times\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
G-42 . . . . . EACH	-----	-----	.60	-----	-----
G-43 . . . . . EACH	.55	-----	-----	-----	-----
G-44 . . . . . EACH	.25	.30	-----	.35	.40
G-45 . . . . . EACH	.25	.30	-----	.35	.40



G-46.
GAS STOVE ANGLE VALVE.



G-47.
GAS STOVE NEEDLE POINT VALVE.

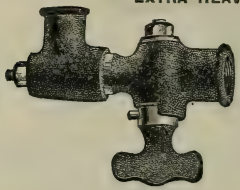
SIZE. . . . . INCHES	$\frac{1}{8}$	$\frac{3}{8}$
G-46 . . . . . EACH	.55	------
G-47 . . . . . EACH	------	.75

BRASS GAS FIXTURE FITTINGS.

EXTRA HEAVY.



G-50. DOUBLE PENDANT.



G-51. REVOLVING PENDANT.

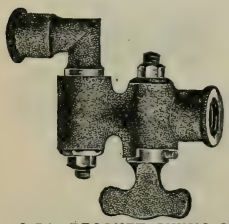


G-52. ELBOW PENDANT.

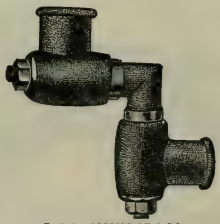


G-53. ELBOW BURNER.

SIZE ..... INCHES	⅛ x ⅛	¼ x ¼	⅜ x ⅛	⅜ x ¼
G-50 ..... EACH	1.80	----	1.80	1.80
G-51 ..... EACH	1.50	----	1.50	1.50
G-52 ..... EACH	1.20	1.20	1.20	1.20
G-53 ..... EACH	1.20	----	1.20	----



G-54. BRACKET, SWING COCK.



G-55. UNIVERSAL SWING.



G-56. TOP SWING.

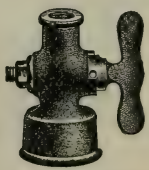


G-57. HOSE COCK.

SIZE ..... INCHES	⅛ x ⅛	¼ x ⅛	¼ x ¼	⅜ x ⅛	⅜ x ¼	⅜ x ⅜
G-54 ..... EACH	----	1.50	1.50	1.50	1.50	----
G-55 ..... EACH	----	1.20	1 20	----	1.20	1.20
G-56 ..... EACH	1.00	1.00	1.00	1.00	1.00	1.00
G-57 ..... EACH	----	----	1.20	----	1.20	----



G-58. MALE LAMP POST.



G-59. FEMALE LAMP POST.



G-60. CHICAGO PATTERN.



G-61. ALCOHOL CUP.

SIZE ..... INCHES	¼	⅜	½	¾	1
G-58 ..... EACH	.80	85	.90	1.00	1.15
G-59 ..... EACH	.80	.85	.90	1.00	1.15
G-60 ..... EACH	1.00	1.05	1.15	1.25	1.40
G-61 ..... EACH	----	1.00	----	----	----

STANDARD STAPLE GAS BRACKETS.

FINISHED IN FRENCH BRONZE OR GILT.



G-85.



G-86.

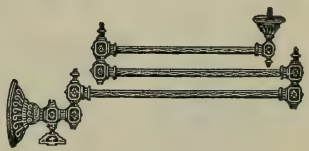


G-87.

G-85. STRAIGHT BRACKET, STIFF	EACH	.45
G-86. CURVE BRACKET, STIFF	EACH	.50
G.87. SINGLE SWING BRACKET	EACH	.55



G-88.



G-89.

G-88. DOUBLE SWING BRACKET	EACH	.80
G-89. TRIPLE SWING BRACKET	EACH	1.15



G-90.



G-91.

G-90. DOUBLE SWING UNIVERSAL BRACKET	EACH	1.15
G-91. TRIPLE SWING UNIVERSAL BRACKET	EACH	1.40

Above prices include Cup, Back Pillar, and Tip.

GAS BRACKETS, WITH SQUARE FITTINGS.

POLISHED BRASS.



G-100. CURVED BRACKET.



G-101. CURVED BRACKET.



G-102. RING BRACKET.

POLISHED CURVED BRACKETS, SQUARE OR ROPE TUBE.

G-100 AND G-101. STIFF CURVED BRACKETS	EACH	.95
G-102. STIFF RING BRACKETS	EACH	1.50



G-103. STRAIGHT BRACKET.



G-104. DOUBLE SWING.



G-105. TRIPLE SWING.

POLISHED BRACKETS, SQUARE OR ROPE TUBE.

STRAIGHT BRACKET, STIFF	EACH	.55
SINGLE SWING BRACKET	EACH	.90
DOUBLE SWING BRACKET	EACH	1.25
TRIPLE SWING BRACKET	EACH	1.65

Above prices include Cup, Back, Pillar, and Tip.



G-115. GLOBE HOLDER.



G-118. BRACKET BACK.



G-121. BURNER CUP.

GLOBE HOLDERS.—G-115.

SIZE INCHES	4	5
PER DOZEN	1.25	1.50

BRACKET BACKS.—G-118.

SIZE INCHES	2½	3
PER DOZEN	.50	.60

BURNER CUPS.—G-121.

PER DOZEN	.20


G-150.


G-151.


G-152.


G-157.



G-159.


G-164.



G-170.

IRON BURNERS.

G-150.	BAT WING MILL BURNERS . . PER DOZEN	.60
G-151.	BILLIARD BURNERS . . . . . PER DOZEN	1.00
G-152.	FISH TAIL BURNERS . . . . . PER DOZEN	.60
G-157.	UNION JET, SIZES 00000 TO 9 . PER GROSS	5.50

BRASS BURNERS.

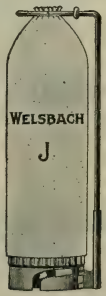
G-159.	BAT WING, SIZES 000 TO 9 . . PER GROSS	5.50
G-164.	CLOUGH GASOLINE BURNERS, IRON TIP PER DOZEN	5.00
G-164.	CLOUGH GASOLINE BURNERS, LAVA TIP PER DOZEN	5.50
G-170.	ALUMINUM TIP . . . . . PER DOZEN	.60

WELSBACH MANTLES.



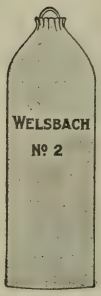
G-175. YUSEA MANTLE.

Triple Weave, 100 Candle Power, Platinum Tied, with Burner Cap and Gauze. Each 65



G-177. J MANTLE.

First Quality, Asbestos Tied, with Burner Cap and Gauze.
Each 55



G-182. No. 2 MANTLE.

Second Quality, Asbestos Loop, Nickel Hook Support.
Each 35


G-185.


G-189.


G-193.


G-197.


G-198.


G-200.


G-201.


G-202.

LAVA TIPS.

G-185.	STANDARD, SIZES 1 TO 8 FEET, PER GROSS	2.50
G-189.	FISH TAIL . . . . . PER GROSS	2.50
G-193.	BAT WING . . . . . PER GROSS	2.50
G-197.	WATER GAS . . . . . PER GROSS	2.50

IRON AND BRASS TIPS.

G-198.	E.H., NICKEL PLATED . . . . . PER GROSS	4.00
G-200.	BAT WING, IRON . . . . . PER GROSS	2.50
G-201.	FISH TAIL, IRON . . . . . PER GROSS	2.50
G-202.	SIGN TIP, BRASS . . . . . PER GROSS	3.00



G-210.
EMPIRE.



G-211.
BASE.



G-214.
PILLAR.



G-215.
BASE FOR LAVA TIP.



G-217.
PLAIN PILLAR WITH ALUMINUM TIP.

BURNERS, PILLARS, ETC.

FIGURE	G-210	G-211	G-214	G-215	G-217
PER DOZEN	1.00	.75	.20	.50	.80



G-220.
ACETYLENE BURNER
STYLE A.

STARR ACETYLENE GAS BURNERS.

G-220	PER DOZEN	2.50
G-221	PER DOZEN	1.25



G-223. ACETYLENE BURNER CLEANER.

Per dozen 50



G-221.
ACETYLENE BURNER
STYLE G.



G-224.
STOVE TUBING.

2 to 12-foot Lengths,
per foot 10



G-229. DROP LIGHT TUBING.

Mohair, $\frac{3}{8}$ and $\frac{1}{2}$ inch . . . . . per foot, .12
All Silk, $\frac{3}{8}$ and $\frac{1}{2}$ inch . . . . . per foot, .40

CIGAR LIGHT TUBING.

Length . . . . . inches,	18	24	36
Price . . . . . per piece,	.40	.50	.70



G-230.
ARGAND BURNER.



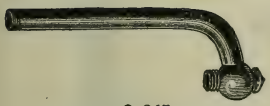
G-232.
ARGAND SHADE HOLDER, 8, 10 AND 12-INCH.



G-234.
ARGAND CHIMNEY, 6, 7 AND 8 INCHES LONG.

ARGAND BURNERS, HOLDERS AND CHIMNEYS.

FIGURE	G-230	G-232	G-234, Glass	G-234, Mica
PER DOZEN	7.00	2.00	1.50	7.00



G-245.
STORK NECK.



G-247.
DROP LIGHT SOCKET.

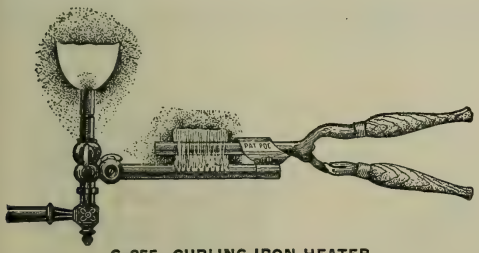


G-249.
BRASS GROUND JOINTS.
PORTABLE CONNECTION.



G-252.
UNION FOR MOHAIR.

FIGURE	G-245	G-247	G-249	G-252
PER DOZEN	2.50	2.50	2.40	1.50



G-255. CURLING IRON HEATER.

CURLING IRON HEATERS.—G-255.

Can be used on any bracket in connection with a Welsbach Light, Self-Lighting Burner, or ordinary Brass Pillar Burner. Does not interfere with using the gas for illumination at the same time.

Burns a blue flame and never soots the iron. Will heat an iron in ten seconds. Nickel plated.

Per dozen 12.00

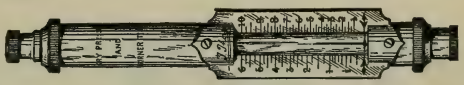


G-262. GAS BURNER CLEANER.



G-263. CLEANER FOR BATWING BURNER.

FIGURE	G-262	G-263
PER DOZEN	1.25	.50



G-265. THORP GAUGE.

FIGURE	G-265	G-267
EACH	7.50	6.00



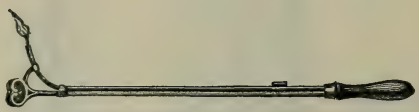
G-267. POCKET TEST METER.

FOR TESTING PRESSURE AND CONSUMPTION OF GAS.

To test consumption of a burner with the Thorp Gauge (the "Pressure" cap at top being in place), the cap is unscrewed and the burner is screwed in its place; the gas is turned on and lighted at burner; the black indicating disc rises within the tube (just as in testing for pressure), and when the disc is at rest the Right hand scale will show number of feet and fractions thereof of gas consumed per hour by the burner.



G-275.
SELF-LIGHTING BURNER.



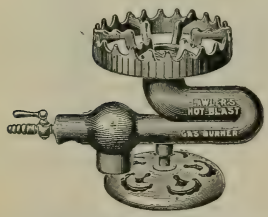
G-278. TAPER, SLIDE AND KEY.



G-281. CIGAR LIGHTER.

FIGURE	G-275	G-278	G-281
PER DOZEN	5.00	6.00	24.00
WAX TAPERS PER BOX	----	.15	-----

Cigar Lighters are complete, with 2 feet of fancy colored gas-tight tubing, goose-neck, brass pillar, etc. Handles are of glass in colors, ruby, amber, blue, opal, or clear.



G-285. HOT BLAST GAS BURNER.
Perfect combustion. Does not smoke or smell.
Each - - - - 4.00



G-287. WIRE GUARD.
Per dozen - - - - 7.00



G-290.
MONITOR GAS STOVE.



G-293.
NOVELTY HEATING BURNER.



G-296.
ATMOSPHERIC HEATER.



G-298.
MONITOR STAND.

MONITOR GAS STOVES, BURNERS, HEATERS, AND STANDS.

FIGURE	G-290	G-290	G-290	G-293	G-296	G-298	G-298	G-298
DIAMETER INCHES	4¾	6½	7½	----	----	Small	Medium	Large
EACH	1.20	1.50	2.00	.40	.35	.35	.60	.85



G-310. BUNSEN BURNER.



G-312. MONITOR BURNER, ALL IRON.



G-316. BY-PASS FOR INCANDESCENT LIGHT.

BUNSEN AND MONITOR BURNERS AND BY-PASSES.

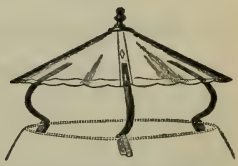
BUNSEN BURNERS . . . . . PER DOZEN			9.00
MONITOR BURNERS, DIAMETER . . . . . INCHES	$2\frac{1}{8}$	$3\frac{1}{4}$	$4\frac{1}{8}$
MONITOR BURNERS . . . . . PER DOZEN	4.50	9.00	10.00
BY-PASSES . . . . . PER DOZEN			3.50



G-320. MICA SMOKE CATCHER, FOR ARGAND CHIMNEYS.



G-322. MICA CANOPY, FOR ARGAND CHIMNEYS.



G-324. MICA CANOPY, FOR 6-INCH GLOBES.



G-326. MICA SMOKE SHADE.



G-328. PORCELAIN SMOKE SHADE.

SMOKE SHADES, ETC.

FIGURE	G-320	G-322	G-324	G-326	G-328
PER DOZEN	2.50	3.00	4.50	4.50	3.00

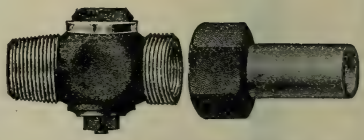
OPAL DOME SHADES, FOR ARGAND BURNERS. (NOT ILLUSTRATED.)

DIAMETER, 10 INCHES . . . . . PER DOZEN	7.50

CORPORATION STOP-COCKS.



H-1. BENT COUPLING, SCREW PLUG.



H-2. STRAIGHT COUPLING, SCREW PLUG.

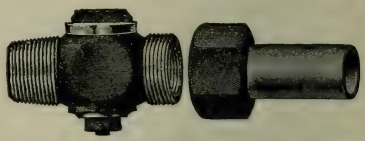
CORPORATION COCKS, SCREWED FOR MUELLER TAPPING MACHINE.—H-1 and H-2.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
H-1 . . . . . EACH	1.20	1.35	1.70	2.50	3.85
H-2 . . . . . EACH	1.20	1.35	1.70	2.50	3.85

H-1 is considered the standard, and is always furnished unless other style is ordered.



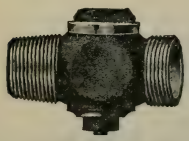
H-3. SCREW PLUG, I. P. THREAD ON LONG END.



H-4. SCREW PLUG, I. P. THREAD ON LONG END.

CORPORATION COCKS, IRON PIPE THREAD ON LONG END.—H-3 and H-4.

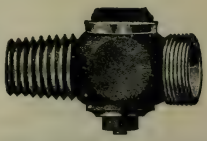
SIZE . . . . . INCHES	⅜	½	⅝	¾	1
H-3 . . . . . EACH	1.30	1.55	1.90	2.80	4.40
H-4 . . . . . EACH	1.30	1.55	1.90	2.80	4.40



H-5. THREADED I. P. ON BOTH ENDS, NOT THREADED FOR SCREW PLUG.



H-6. THREADED I. P. ON SHORT END, MUELLER THREAD ON LONG END, FITTED FOR SCREW PLUG.



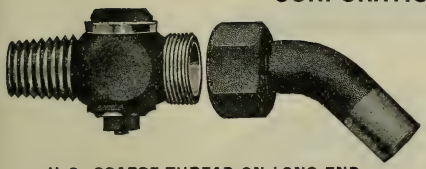
H-7. THREADED I. P. ON SHORT END, COARSE THREAD FOR WOOD MAIN.

CORPORATION COCKS, FOR IRON PIPE AND WOOD MAIN.—H-5, H-6, and H-7.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
H-5 . . . . . EACH	1.05	1.30	1.65	2.40	3.80
H-6 . . . . . EACH	----	1.10	1.40	2.10	3.35
H-7 . . . . . EACH	----	1.50	1.90	2.70	4.10

For Rough Stop Cocks and Roundways see pages 238 to 245.

CORPORATION STOP-COCKS.



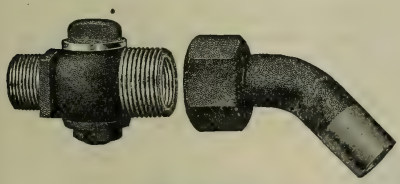
H-8. COARSE THREAD ON LONG END. FOR WOOD PIPE.



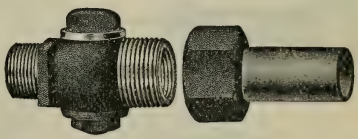
H-9. COARSE THREAD ON LONG END, FOR WOOD PIPE.

CORPORATION COCKS, FOR WOOD PIPE.—H-8 and H-9.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
H-8 . . . . . EACH	----	1.65	2.00	3.00	4.70
H-9 . . . . . EACH	----	1.65	2.00	3.00	4.70



H-20. BENT COUPLING FOR PAYNE MACHINE.



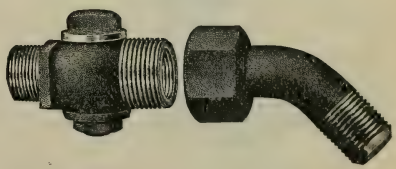
H-21. STRAIGHT COUPLING FOR PAYNE MACHINE.

CORPORATION COCKS, FOR PAYNE TAPPING MACHINE.—H-20 and H-21.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
H-20 . . . . . EACH	1.20	1.35	1.70	2.50	3.85	8.00	10.67	18.34
H-21 . . . . . EACH	1.20	1.35	1.70	2.50	3.85	8.00	10.67	18.34
IRON PIPE BOTH ENDS, WITHOUT COUPLING . . . . . EACH	1.00	1.10	1.40	2.10	3.85	6.75	8.35	15.00



H-22. FOR CLOW PATENT LEAD PIPE CONNECTION, MUELLER MACHINE.



H-23. FOR CLOW LEAD PIPE CONNECTION, PAYNE MACHINE.

CORPORATION COCKS, FOR CLOW CONNECTION.—H-22 and H-23.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
H-22. FOR MUELLER MACHINE . . . . . EACH	1.40	1.55	1.90	2.70	4.05
H-23. FOR PAYNE MACHINE . . . . . EACH	----	1.55	1.90	2.70	4.05

For Rough Stop Cocks and Roundways see pages 238 to 245.



H-33. LEAD GOOSE NECKS.

LEAD GOOSE NECKS, COMPLETE.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
EACH	2.80	3.00	3.40	4.00	5.40

Our Lead Goose Necks are made from extra strong lead pipe, 18 inches long, with Corporation Stop Cock (either screw or hexagon), wiped on one end and male brass soldering nipple on the other. This length is considered standard, but they are made in special lengths when desired. Joints wiped by practical plumbers. Thoroughly tested to a high water pressure.

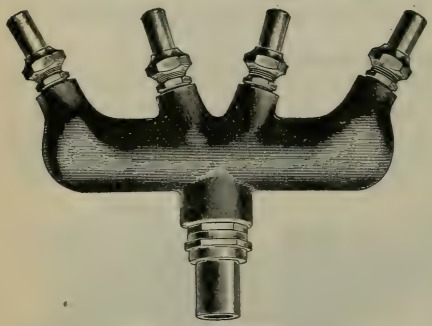


H-35. AQUA-PHONE.

AQUA-PHONE.—H-35.

This instrument is the same in appearance as the regular "Bell" telephone receiver. To use it, the regular rod used to turn on or off the water at the street service is placed in position. The metal rod at the back of the "Aqua-phone" is placed in contact with it. If any water is running through the valve to which the rod is attached, it can be heard in the "Aqua-phone" when the ear is placed as in ordinary telephone conversation. This instrument is sensitive to small leaks or waste of water.

Each 4.00



H-37. CLOW WATER CONNECTION.

PATENT APPLIED FOR.

CLOW WATER CONNECTIONS.—H-37.

NUMBER	1	2	3	4
SIZE OUTLET CONNECTION . INCHES	1	1¼	1½	2
NUMBER OF ¾-INCH BRANCHES . .	2	3	4	----
NUMBER OF 1-INCH BRANCHES . .	----	----	----	4
PRICE . . . . . EACH	1.75	2.50	3.00	5.00

This Connection is intended for use where a 1-inch Connection or larger is to be made and main cannot be tapped for Corporation Cock larger than ¾ or 1 inch. The 1-inch Connection has two branches, the 1¼ has three, and the 1½ Connection has four, all ¾-inch. The 2-inch Connection has four 1-inch branches.

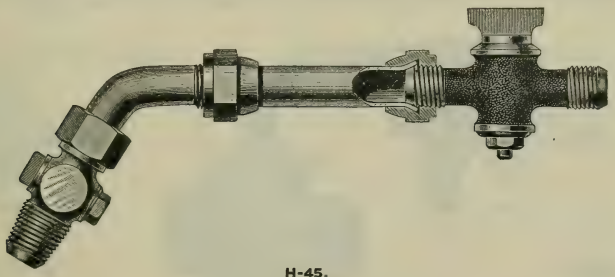
When the Connection is set about 18 inches from the main, the distance between each tap in main would be about 12 inches.

The inlet Connections are all made for use with lead or iron pipe to the main, and have union joints. The outlet Connection is also made with union joint and for lead or iron pipe.

Wherever used they give excellent satisfaction, and are a great improvement over the old method of making large connections, and are much cheaper.

CLOW PATENT LEAD PIPE CONNECTION.

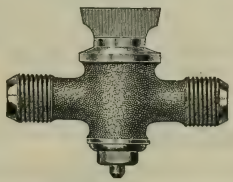
SHOWING CORPORATION COCK AND ROUND-WAY STOP, WITH LEAD PIPE CONNECTED.



H-45.

We guarantee a joint made with this Connection is stronger and more durable than the regular solder joint, and much cheaper. Any one capable of tapping a main can make a perfect joint with this Connection in a few minutes, and in any place where lead and iron pipe are to be connected it will be found more satisfactory and cheaper than the solder joint.





H-46.



TEE HANDLE ROUND-WAY STOPS.—H-46.

IRON PIPE BOTH ENDS, FOR CLOW PATENT LEAD PIPE CONNECTIONS.

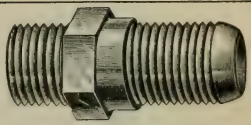
SIZE . . . . . INCHES	½	⅝	¾	1
PER DOZEN	19.00	23.00	28.00	48.00



H-47.
LEAD PIPE CONNECTION.



H-47.
SECTIONAL VIEW.



H-50.
CLOW NIPPLE.

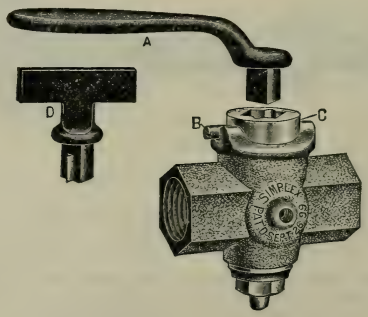
CLOW PATENT LEAD PIPE CONNECTIONS AND NIPPLES.

SIZE . . . . . INCHES	½	⅝	¾	1
H-47. CONNECTIONS . . . . . EACH	.15	.20	.25	.35
H-50. NIPPLES . . . . . EACH	.25	.30	.40	.55

Steel Expander for spreading pipe in connection, each, 65 cents.

SIMPLEX PATENT ROUND-WAY STOPS.

STEAM METAL, TESTED TO 200 POUNDS PRESSURE. EVERY ONE WARRANTED.

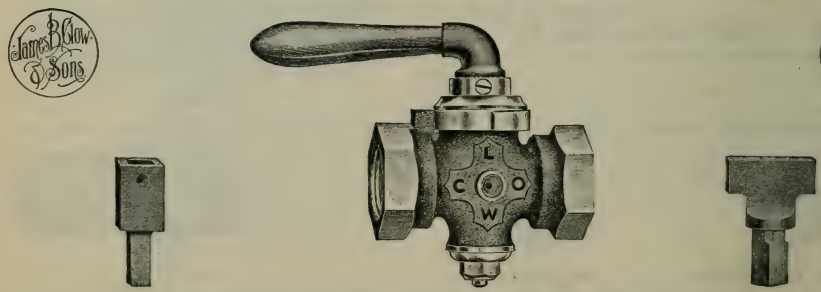


ILLUSTRATED IN ALL STYLES, PAGE 239.

Simplex Patent Round-Way Stops, and Stop and Waste Cocks, are interchangeable from right to left hand, and for Lever or Tee handle or for hydrant rod. Is it set right? is a question never asked of the Simplex. It is impossible to set it wrong. The handle must always be parallel with the pipe when cock is open, and at right angles with pipe when water is shut off. It cannot be set in any other way than the right way, and a child can change it in half a minute. Handles are interchangeable. Lever handles are made of malleable iron.

CLOW IMPROVED STOPS.

STEAM METAL, TESTED TO 200 POUNDS PRESSURE.
GUARANTEED TO STAND ANY WATER WORKS PRESSURE IN AMERICA.

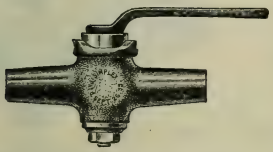


ILLUSTRATED IN ALL STYLES, PAGE 242.

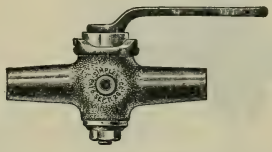
THE CLOW IMPROVED STOPS are the finest made for high pressures and long service, and are guaranteed to stand any Water Works Pressure in America. They possess all the good qualities of other makes, and several not possessed by any other. They are interchangeable, Right or Left Hand, for Tee or Lever Handle, or with Socket for Rod. The Clow Stop is a superfine article in every respect, guaranteed not to twist or leak, being severely tested in our Foundry before packing. Every Stop cast with our name on the side.

SIMPLEX PATENT ROUND-WAYS.

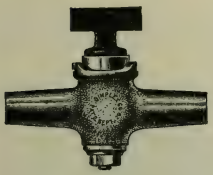
STEAM METAL, TESTED TO 200 POUNDS PRESSURE. EVERY ONE WARRANTED.



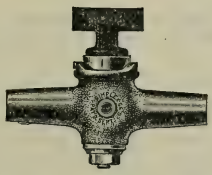
H-65. L. H. STOP, LEAD PIPE.



H-66. L. H. STOP WITH CHECK AND WASTE, LEAD PIPE.



H-67. T. H. STOP, LEAD PIPE.



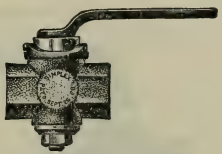
H-68. T. H. STOP WITH CHECK AND WASTE, LEAD PIPE



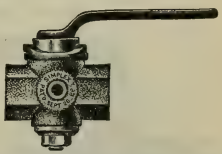
H-69. T. H. STOP, IRON PIPE.



H-74. T. H. STOP WITH CHECK AND WASTE, IRON PIPE.



H-75. L. H. STOP, IRON PIPE.



H-76 L. H. STOP WITH CHECK AND WASTE IRON PIPE.

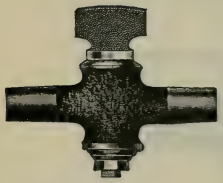
SIMPLEX ROUND-WAY STOPS, FOR LEAD PIPE.—H-65, H-66, H-67 and H-68.

SIZE . . . . . INCHES	½	⅝	¾	1
PLAIN . . . . . PER DOZEN	18.00	21.50	26.50	46.00
WITH CHECK AND WASTE . . . . . PER DOZEN	20.00	23.50	28.50	49 00

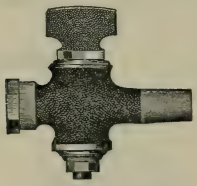
SIMPLEX ROUND-WAY STOPS, FOR IRON PIPE.—H-69, H-74, H-75 and H-76.

SIZE . . . . . INCHES	½	⅝	¾	1	1¼	1½
PLAIN . . . . . PER DOZEN	20.00	24.50	29.50	50 00	77.50	110 50
WITH CHECK AND WASTE PER DOZEN	22 00	26.50	31.50	53.00	81.50	116.50

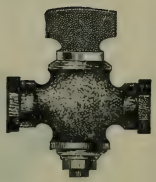
ROUGH ROUNDWAYS.



H-78.
TEE HANDLE, L. P.



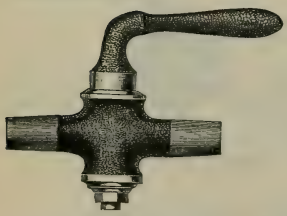
H-79.
TEE HANDLE, L. AND I. P.



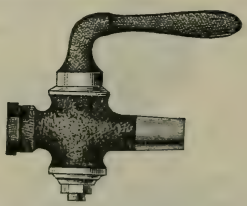
H-80.
TEE HANDLE, I. P.

TEE HANDLE ROUNDWAYS.

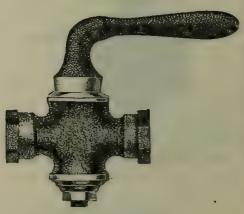
SIZE ..... INCHES	½	⅝	¾	1	1¼	1½	2
H-78. PLAIN ..... PER DOZEN	17.00	20.00	25.00	44.00	70.00	100.00	180.00
H-78. WITH CHECK AND WASTE ..... PER DOZEN	19.00	22.00	27.00	47.00	74.00	106.00	190.00
H-79. PLAIN ..... PER DOZEN	18.00	21.50	26.50	46.00	72.50	103.50	185.00
H-79. WITH CHECK AND WASTE ..... PER DOZEN	20.00	23.50	28.50	49.00	76.50	109.50	195.00
H-80. PLAIN ..... PER DOZEN	19.00	23.00	28.00	48.00	75.00	107.00	190.00
H-80. WITH CHECK AND WASTE ..... PER DOZEN	21.00	25.00	30.00	51.00	79.00	113.00	200.00



H-82.
LEVER HANDLE, L. P.



H-83.
LEVER HANDLE, L. AND I. P.

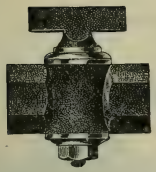


H-84.
LEVER HANDLE, I. P.

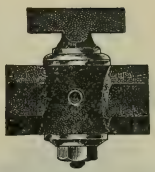
LEVER HANDLE ROUNDWAYS.

SIZE ..... INCHES	½	⅝	¾	1	1¼	1½	2
H-82. PLAIN ..... PER DOZEN	18.00	21.50	26.50	46.00	72.50	103.50	185.00
H-82. WITH CHECK AND WASTE ..... PER DOZEN	20.00	23.50	28.50	49.00	76.50	109.50	195.00
H-83. PLAIN ..... PER DOZEN	19.00	23.00	28.00	48.00	75.00	107.00	190.00
H-83. WITH CHECK AND WASTE ..... PER DOZEN	21.00	25.00	30.00	51.00	79.00	113.00	200.00
H-84. PLAIN ..... PER DOZEN	20.00	24.50	29.50	50.00	77.50	110.50	195.00
H-84. WITH CHECK AND WASTE ..... PER DOZEN	22.00	26.50	31.50	53.00	81.50	116.50	205.00

ROUGH ROUND-WAYS.



H-86. NEWPORT.

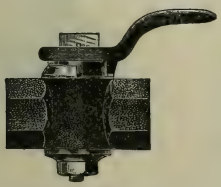


H-87. NEWPORT CHECK AND WASTE.

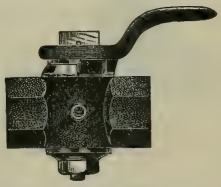
TEE HANDLE ROUND-WAYS, FOR IRON PIPE.—H-86 and H-87.

NEWPORT PATTERN.

SIZE . . . . . INCHES	½	¾	1
H-86. PLAIN . . . . . PER DOZEN	15.00	20.00	40.00
H-87. WITH CHECK AND WASTE . . . . . PER DOZEN	16.00	21.50	42.00



H-89. LEVER HANDLE, NEWPORT.



H-90. NEWPORT CHECK AND WASTE.

LEVER HANDLE ROUND-WAYS, FOR IRON PIPE.—H-89 and H-90.

NEWPORT PATTERN.

SIZE . . . . . INCHES	½	¾	1
H-89. PLAIN . . . . . PER DOZEN	15.00	20.00	40.00
H-90. WITH CHECK AND WASTE . . . . . PER DOZEN	16.00	21.50	42.00



H-92. FOR LEAD PIPE.



H-93. MALE AND FEMALE, IRON PIPE.

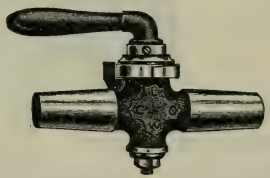
TEE HANDLE ROUND-WAYS.—H-92 and H-93.

MINNEAPOLIS PATTERN.

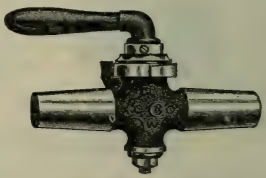
SIZE . . . . . INCHES	½	⅝	¾	1
H-92. FOR LEAD PIPE . . . . . PER DOZEN	21.00	26.00	29.50	50.00
H-93. FOR IRON PIPE . . . . . PER DOZEN	23.00	29.00	32.50	54.00
ADD, FOR CHECK AND WASTE . . . . . PER DOZEN	2.00	2.00	2.00	3.00

CLOW IMPROVED FLAT-WAY STOPS.

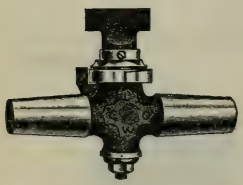
STEAM METAL, TESTED TO 200 POUNDS PRESSURE. GUARANTEED TO STAND ANY WATER WORKS PRESSURE IN AMERICA.



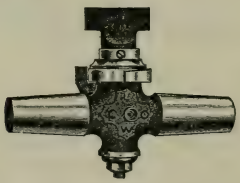
H-105. L. H. STOP, LEAD PIPE.



H-106. L. H. STOP WITH CHECK AND WASTE, LEAD PIPE.



H-107. T. H. STOP, LEAD PIPE.



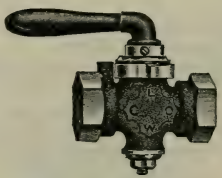
H-108. T. H. STOP WITH CHECK AND WASTE, LEAD PIPE.



H-109. T. H. STOP, IRON PIPE.



H-110. T. H. STOP WITH CHECK AND WASTE, IRON PIPE.



H-111. L. H. STOP, IRON PIPE



H-112. L. H. STOP WITH CHECK AND WASTE, IRON PIPE.

CLOW IMPROVED FLAT-WAY STOPS FOR LEAD PIPE.—H-105, H-106, H-107, H-108.

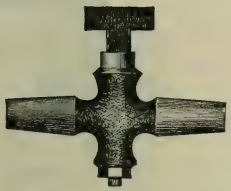
SIZE . . . . . INCHES	½	⅝	¾	1
PLAIN . . . . . PER DOZEN	14.00	16.50	20.50	30.00
WITH CHECK AND WASTE . . . . . PER DOZEN	16.00	18.50	22.50	33.00

CLOW IMPROVED FLAT-WAY STOPS FOR IRON PIPE.—H-109, H-110, H-111, H-112.

SIZE . . . . . INCHES	½	⅝	¾	1	1¼	1½	2
PLAIN . . . . . PER DOZEN	16.00	19.50	23.50	34.00	53.50	74.50	125.00
WITH CHECK AND WASTE . . . . . PER DOZEN	18.00	21.50	25.50	37.00	57.50	80.50	135.00

Sockets for Rod will be furnished in place of Tee or Lever Handle, when so ordered, without additional charge.

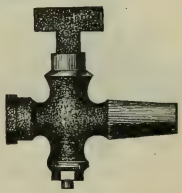
ROUGH STOPS.



H-115. TEE HANDLE, L. P.



H-116. CHICAGO PATTERN.



H-117. TEE HANDLE, L. AND I. P.

TEE HANDLE ROUGH STOPS.

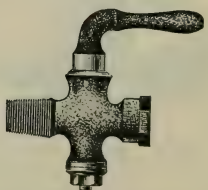
SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
H-115 PLAIN . . . . . PER DOZEN	11.00	13.00	15.00	19.00	28.00	46.00	64.00	110.00
H-115 WITH CHECK AND WASTE . . PER DOZEN	13.00	15.00	17.00	21.00	31.00	50.00	70.00	120.00
H-116 CHICAGO PATTERN . . . . . PER DOZEN	12.50	14.50	16.50	20.50	30.00	.....	.....	.....
H-117 PLAIN . . . . . PER DOZEN	12.00	14.00	16.50	20.50	30.00	48.50	67.50	115.00
H-117 WITH CHECK AND WASTE . . PER DOZEN	14.00	16.00	18.50	22.50	33.00	52.50	73.50	125.00



H-123. TEE HANDLE, I. P.



H-124. TEE HANDLE, SCREWED IN AND OUT.

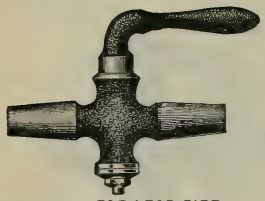


H-125. LEVER HANDLE. SCREWED IN AND OUT.

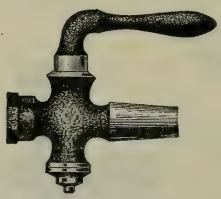
ROUGH STOPS FOR IRON PIPE.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
H-123 PLAIN . . . . . PER DOZEN	13.00	15.00	18.00	22.00	32.00	51.00	71.00	120.00
H-123 WITH CHECK AND WASTE . . PER DOZEN	15.00	17.00	20.00	24.00	35.00	55.00	77.00	130.00
H-124 PLAIN . . . . . PER DOZEN	13.00	15.00	18.00	22.00	32.00	51.00	71.00	120.00
H-124 WITH CHECK AND WASTE . . PER DOZEN	15.00	17.00	20.00	24.00	35.00	55.00	77.00	130.00
H-125 PLAIN . . . . . PER DOZEN	14.00	16.00	19.50	23.50	34.00	53.50	74.50	125.00
H-125 WITH CHECK AND WASTE . . . PER DOZEN	16.00	18.00	21.50	25.50	37.00	57 50	80 50	135 00

ROUGH STOPS.



H-127. FOR LEAD PIPE.



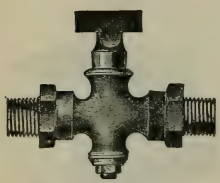
H-128. FOR LEAD AND IRON PIPE.



H-129. FOR IRON PIPE.

LEVER HANDLE ROUGH STOPS.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
H-127 PLAIN . . . . . PER DOZEN	12.00	14.00	16.50	20.50	30.00	48.50	67.50	115.00
H-127 WITH CHECK AND WASTE . . . . . PER DOZEN	14.00	16.00	18.50	22.50	33.00	52.50	73.50	125.00
H-128 PLAIN . . . . . PER DOZEN	13.00	15.00	18.00	22.00	32.00	51.00	71.00	120.00
H-128 WITH CHECK AND WASTE . . . . . PER DOZEN	15.00	17.00	20.00	24.00	35.00	55.00	77.00	130.00
H-129 PLAIN . . . . . PER DOZEN	14.00	16.00	19.50	23.50	34.00	53.50	74.50	125.00
H-129 WITH CHECK AND WASTE . . . . . PER DOZEN	16.00	18.00	21.50	25.50	37.00	57.50	80.50	135.00



H-132. MALE ENDS.



H-133. HYDRANT COCK FOR LEAD AND IRON PIPE.



H-134. CLOW HYDRANT COCK FOR IRON PIPE.

ROUGH STOPS AND HYDRANT COCKS.—H-132 and H-133.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼
H-132. PLAIN . . . . . PER DOZEN	14.00	16.00	19.50	23.50	34.00	-----
H-132. WITH CHECK AND WASTE . . . . . PER DOZEN	16.00	18.00	21.50	25.50	37.00	-----
H-133. . . . . PER DOZEN	-----	20.00	23.50	28.00	39.50	61.50

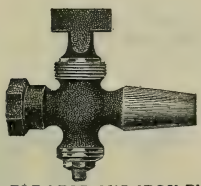
CLOW HYDRANT COCKS.—H-134.

TESTED TO 200 POUNDS PRESSURE. GUARANTEED TO STAND ANY WATER WORKS PRESSURE IN AMERICA.

SIZE . . . . . INCHES	½	⅝	¾	1	1¼
FOR IRON PIPE . . . . . PER DOZEN	25.00	30.00	35.50	57.50	88.00



H-137. FOR LEAD PIPE.



H-138. FOR LEAD AND IRON PIPE.



H-139. FOR IRON PIPE.

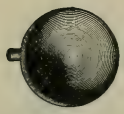
TEE HANDLE ROUGH STOPS.—H-137, H-138 and H-139.

MINNEAPOLIS PATTERN.

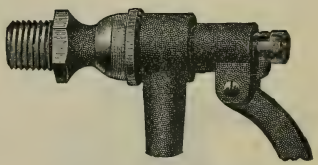
SIZE . . . . . INCHES	½	⅝	¾	1
H-137. FOR LEAD PIPE . . . . . PER DOZEN	15.50	19.00	22.50	33.00
H-138. FOR LEAD AND IRON PIPE . . . . . PER DOZEN	16.50	20.00	24.00	35.00
H-139. FOR IRON PIPE . . . . . PER DOZEN	17.50	-----	25.50	37.00
ADD FOR CHECK AND WASTE . . . . . PER DOZEN	2.00	2.00	2.00	3.00



H-143. FOR LEAD PIPE.



H-144. COPPER BALL.



H-145. FOR IRON PIPE.

IMPROVED BALL COCKS.—H-143 and H-145.

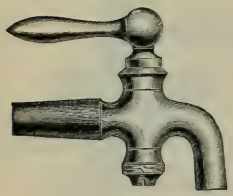
SIZE . . . . . INCHES	½	⅝	¾	1	1¼	1½	2
H-143 . . . . . PER DOZEN	12.00	14.00	20.00	34.00	56.00	80.00	150.00
H-145 . . . . . PER DOZEN	12.00	14.00	20.00	34.00	56.00	80.00	150.00

These Ball Cocks have stems with standard iron pipe thread on end. Sizes 1¼-inch and smaller are threaded ⅛-inch; sizes 1½ and 2-inch are threaded ¼-inch.

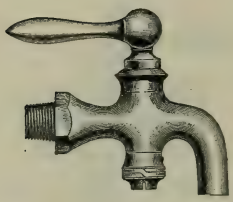
COPPER BALLS, WITH SPUD TAPPED, FOR IRON PIPE.—H-144.

SIZE . . . . . INCHES	5	6	7	8	9	10	12
WITH SPUD THREADED, FOR IRON PIPE . . . EACH	4.00	6.00	9.00	15.00	25.00	40.00	60.00

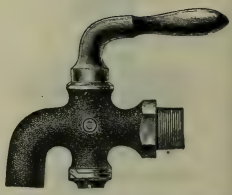
Balls 5 to 8-inch inclusive are tapped ⅛-inch, Iron Pipe Size. Larger Balls tapped ¼-inch.



H-150. FOR LEAD PIPE.



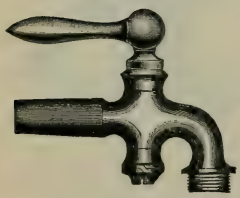
H-151. FOR IRON PIPE.



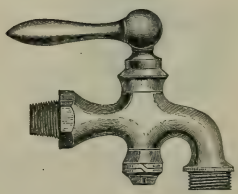
H-152. ROUGH, FOR IRON PIPE.

PLAIN BIBBS, GROUND PLUG.

SIZE . . . . . INCHES	¼	⅜	½	⅝	¾	1	1¼	1½	2
H-150. FINISHED . . . . . PER DOZEN	13.00	15.00	17.00	20.00	26.00	39.00	-----	-----	-----
H-150. NICKEL PLATED . . . . . PER DOZEN	15.00	17.00	19.50	22.50	28.50	42.00	-----	-----	-----
H-151. FINISHED . . . . . PER DOZEN	15.00	17.00	19.00	22.00	28.00	42.00	-----	-----	-----
H-151. NICKEL PLATED . . . . . PER DOZEN	17.00	19.00	21.50	24.50	30.50	45.00	-----	-----	-----
H-152. ROUGH. . . . . PER DOZEN	11.00	13.00	16.00	18.00	23.00	35.00	56.00	78.00	160.00



H-156. FOR LEAD PIPE.



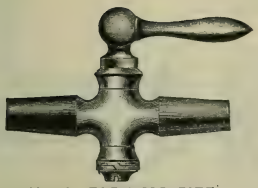
H-157. FOR IRON PIPE.



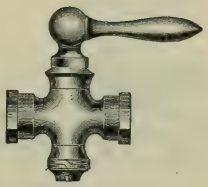
H-158. ROUGH, FOR IRON PIPE.

HOSE BIBBS, GROUND PLUG.

SIZE . . . . . INCHES	½	⅝	¾	1	1¼	1½	2
H-156. FINISHED . . . . . PER DOZEN	19.00	22.00	28.00	42.00	-----	-----	-----
H-156. NICKEL PLATED . . . . . PER DOZEN	21.50	24.00	30.50	45.00	-----	-----	-----
H-157. FINISHED . . . . . PER DOZEN	21.00	24.00	30.00	45.00	68.00	96.00	190.00
H-157. NICKEL PLATED . . . . . PER DOZEN	23.50	26.50	32.50	48.00	-----	-----	-----
H-158. ROUGH . . . . . PER DOZEN	18.00	20.00	25.00	38.00	60.00	84.00	170.00



H-162. FOR LEAD PIPE.



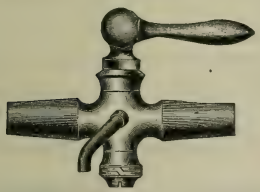
H-164. FOR IRON PIPE.

PLAIN STOPS, LEVER HANDLE, FOR LEAD PIPE.—H-162.

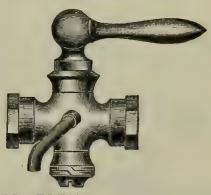
SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
FINISHED . . . . . PER DOZEN	18.50	19.50	22.00	28.50	42.00
NICKEL PLATED . . . . . PER DOZEN	20.50	22.00	24.50	31.00	45.00

PLAIN STOPS, LEVER HANDLE, FOR IRON PIPE.—H-164.

SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
FINISHED . . . . . PER DOZEN	20.50	21.50	25.00	31.50	46.00
NICKEL PLATED . . . . . PER DOZEN	22.50	24.00	27.50	34.00	49.00



H-168. FOR LEAD PIPE.



H-169. FOR IRON PIPE.

SHOWER COCKS, LEVER HANDLE, FOR LEAD PIPE.—H-168.

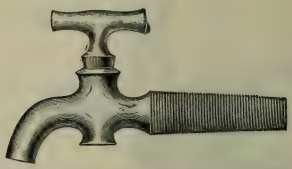
SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
FINISHED . . . . . PER DOZEN	20.50	21.50	24.00	30.50	45.00
NICKEL PLATED . . . . . PER DOZEN	22.50	24.00	26.50	33.00	48.00

SHOWER COCKS, LEVER HANDLE, FOR IRON PIPE.—H-169.

SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
FINISHED . . . . . PER DOZEN	22.50	23.50	27.00	33.50	49.00
NICKEL PLATED . . . . . PER DOZEN	24.50	26.00	29.50	36.00	52.00



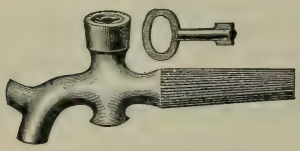
H-171. RACKING COCK, TO DRIVE.



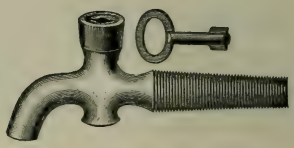
H-172. RACKING COCK, TO SCREW.

RACKING COCKS.—H-171 and H-172.

SIZE . . . . . INCHES	¼	⅜	½	⅝	¾	1
H-171. FINISHED . . . . . PER DOZEN	6.50	9.00	11.50	16.00	19.00	32.00
H-172. FINISHED . . . . . PER DOZEN	7.00	9.50	12.50	17.50	21.00	34.50



H-177. LOCK COCK, TO DRIVE.



H-178. LOCK COCK, TO SCREW.

RACKING COCKS.—H-177 and H-178.

SIZE . . . . . INCHES	¼	⅜	½	⅝	¾	⅞
H-177. FINISHED . . . . . PER DOZEN	6.50	8.50	12.00	16.50	20.00	27.00
H-178. FINISHED . . . . . PER DOZEN	7.00	9.00	13.00	18.00	22.00	30.00



H-181. TO SOLDER.



H-182. TO SCREW.



H-183. TO SOLDER.



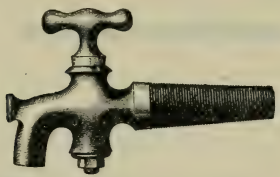
H-184. TO SCREW.

COMPRESSION COCKS FOR OIL CANS, WATER COOLERS, ETC.

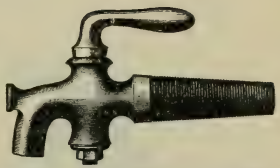
SIZES AND FINISH . . . . . INCHES	¼ Rough	¼ N. P.	⅜ Rough	⅜ N. P.
H-181. TO SOLDER . . . . . PER DOZEN	4.50	5.00	6.00	6.50
H-182. TO SCREW . . . . . PER DOZEN	5.00	5.50	6.50	7.00
H-183. TO SOLDER . . . . . PER DOZEN	4.50	5.00	6.00	6.50
H-184. TO SCREW . . . . . PER DOZEN	5.25	5.75	6.75	7.25



H-188. LOOSE KEY PATTERN.



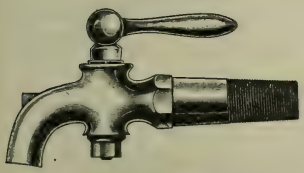
H-189. TEE HANDLE PATTERN.



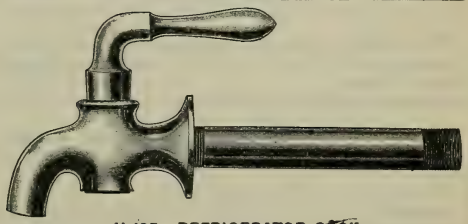
H-190. LEVER HANDLE PATTERN.

LIQUOR COCKS.

DIAMETER OF BORE . . . . . INCHES	⅜	½	¾
H-188. WITH KEY, FINISHED BRASS . . . . . EACH	2.80	3.50	5.00
H-189. TEE HANDLE, FINISHED BRASS . . . . . EACH	2.00	2.70	4.00
H-190. LEVER HANDLE, FINISHED BRASS . . . . . EACH	2.00	2.70	4.00



H-194. PETROLEUM FAUCET.



H-195. REFRIGERATOR COCK.

PETROLEUM OIL FAUCETS.—H-194
ALL IRON WITH BRASS KEY.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
PER DOZEN	6.75	8.25	9.00	10.50	12.00

¾-INCH REFRIGERATOR COCKS.—H-195.

POLISHED BRASS	PER DOZEN	8.00
NICKEL PLATED	PER DOZEN	9.50



H-199. URN COCK, DROP HANDLE.



H-200. COOLER COCK.

URN COCKS.—H-199.

SIZE . . . . . INCHES	¼	5/16	⅜	7/16
NICKEL PLATED . . . . . PER DOZEN	30.00	32.00	34.00	38.50

COOLER COCKS.—H-200.

SIZE . . . . . INCHES	¼	⅜	½	⅝
NICKEL PLATED . . . . . PER DOZEN	8.50	9.00	10.50	14.00

COMPRESSION BIBBS.



H-206.
PLAIN BIBB, L. P.



H-207.
HOSE BIBB, L. P.

COMPRESSION PLAIN BIBBS, FOR LEAD PIPE.—H-206.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
FINISHED . . . . . PER DOZEN	10.00	11.00	13.00	18.00	34.00	52.00	80.00	160.00
NICKEL PLATED . . . . . PER DOZEN	12.00	13.00	15.00	20.50	37.00	-----	-----	------

COMPRESSION HOSE BIBBS, FOR LEAD PIPE.—H-207.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
FINISHED . . . . . PER DOZEN	12.00	13.00	15.00	20.00	37.00	56.00	86.00	170.00
NICKEL PLATED . . . . . PER DOZEN	14.00	15.50	17.50	22.50	40.00	-----	-----	------



H-208.
PLAIN BIBB, I. P.



H-209.
HOSE BIBB, I. P.

COMPRESSION PLAIN BIBBS, FOR IRON PIPE.—H-208.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
FINISHED . . . . . PER DOZEN	12.00	13.00	15.00	20.00	37.00	56.00	86.00	170.00
NICKEL PLATED . . . . . PER DOZEN	14.00	15.50	17.50	22.50	40.00	-----	-----	------

COMPRESSION HOSE BIBBS, FOR IRON PIPE.—H-209.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1	1¼	1½	2
FINISHED . . . . . PER DOZEN	14.00	15.00	17.00	22.00	40.00	60.00	92.00	180.00
NICKEL PLATED . . . . . PER DOZEN	16.00	17.50	19.50	24.50	43.00	-----	-----	------

COMPRESSION BIBBS.



H-213. PLAIN BIBB, I. P.



H-214. HOSE BIBB, I. P.

COMPRESSION PLAIN BIBBS, FOR IRON PIPE, WITHOUT SHOULDER.—H-213.

SIZE - - - - - - - - INCHES	⅜	½	⅝	¾	1	1¼	1½	2
ROUGH - - - - - - PER DOZEN	11.50	12.50	14.00	19.00	33.00	48.00	74.00	150.00
FINISHED - - - - - PER DOZEN	12.00	13.00	15.00	20.00	37.00	56.00	86.00	170.00
NICKEL-PLATED - - PER DOZEN	14.00	15.50	17.50	22.50	40.00	-----	-----	------

COMPRESSION HOSE BIBBS, FOR IRON PIPE, WITHOUT SHOULDER.—H-214.

SIZE - - - - - - - - INCHES	⅜	½	⅝	¾	1	1¼	1½	2
ROUGH - - - - - - PER DOZEN	13.50	14.50	16.00	21.00	36.00	52.00	80.00	160.00
FINISHED - - - - - PER DOZEN	14.00	15.00	17.00	22.00	40.00	60.00	92.00	180.00
NICKEL-PLATED - - PER DOZEN	16.00	17.50	19.50	24.50	43.00	-----	-----	------



H-218. PLAIN BIBB, WITH SOLID FLANGE.



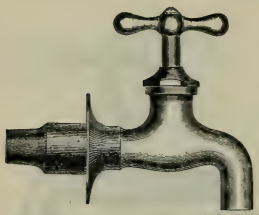
H-219. HOSE BIBB, WITH SOLID FLANGE.

COMPRESSION BIBBS, WITH SOLID FLANGE, FOR IRON PIPE.

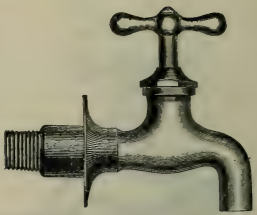
SIZE - INCHES	½	⅝	¾	1
H-218. FINISHED - - - - - - - - - - - - - - - - - - PER DOZEN	16.00	17.50	25.00	46.00
H-218. NICKEL-PLATED - - - - - - - - - - - - - - - PER DOZEN	18.50	20.00	27.50	49.00
H-219. FINISHED - - - - - - - - - - - - - - - - - - PER DOZEN	18.00	19.50	27.00	49.00
H-219. NICKEL-PLATED - - - - - - - - - - - - - - - PER DOZEN	20.50	22.00	29.50	52.00

For Stuffing Box add to regular list per dozen, ¼ and ⅜ inch, $2.00; ½-inch, $3.00; 1-inch, $4.00.

COMPRESSION BIBBS.



H-223. PLAIN BIBB, FLANGE AND THIMBLE.



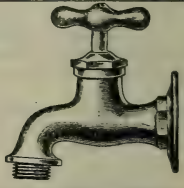
H-224. PLAIN BIBB, FLANGE AND THIMBLE, I. P.

COMPRESSION BIBBS, FLANGE, AND THIMBLE.

SIZE . . . . . INCHES	½	⅝	¾	1
H-223. FINISHED . . . . . PER DOZEN	18.00	21.00	28.00	51.00
H-223. NICKEL PLATED . . . . . PER DOZEN	21.50	24.50	32.00	55.00
H-224. FINISHED . . . . . PER DOZEN	20.00	23.00	30.50	54.00
H-224. NICKEL PLATED . . . . . PER DOZEN	23.50	26.50	34.50	58.00



H-226. SOLID FLANGE, INSIDE THREAD.



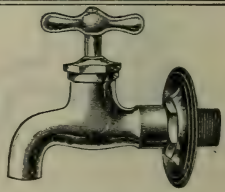
H-227. SOLID FLANGE, INSIDE THREAD.

COMPRESSION BIBBS WITH FLANGE, INSIDE THREADS.

SIZE . . . . . INCHES	½	⅝	¾	1
H-226. PLAIN BIBB, FINISHED . . . . . PER DOZEN	16.00	17.50	25.00	46.00
H-226. PLAIN BIBB, NICKEL PLATED . . . . . PER DOZEN	18.50	20.00	27.50	49.00
H-227. HOSE BIBB, FINISHED . . . . . PER DOZEN	18.00	19.50	27.00	49.00
H-227. HOSE BIBB, NICKEL PLATED . . . . . PER DOZEN	20.50	22.00	29.50	52.00



H-228. WASH TRAY BIBB, I. P.

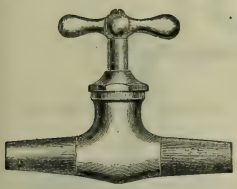


H-229. LOOSE FLANGE, I. P.

COMPRESSION WASH TRAY AND SINK BIBBS.

SIZE . . . . . INCHES	½	⅝	¾
H-228. FOR IRON PIPE . . . . . PER DOZEN	14.00	16.00	21.00
H-228. FOR LEAD PIPE . . . . . PER DOZEN	12.00	14.00	19.00
H-229. PLAIN BIBB, LOOSE FLANGE, FINISHED . . . . . PER DOZEN	19.00	21.00	26.00
H-229. PLAIN BIBB, LOOSE FLANGE, NICKEL PLATED . . . . . PER DOZEN	23.00	25.00	30.00

COMPRESSION STOPS.



H-232. PLAIN STOP.



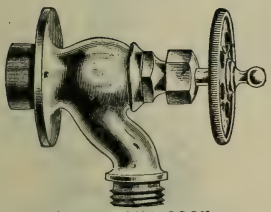
H-233. FOR LEAD AND IRON PIPE.



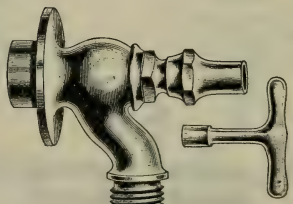
H-234. FOR IRON PIPE.

COMPRESSION STOPS.

SIZE — INCHES	⅜	½	⅝	¾	1
H-232. PLAIN STOP, FINISHED — PER DOZEN	11.00	12.00	14.00	22.00	36.00
H-232. PLAIN STOP, NICKEL PLATED — PER DOZEN	13.00	14.50	16.50	24.50	39.00
H-233. FOR LEAD AND IRON PIPE, FINISHED — PER DOZEN	12.00	13.00	15.00	23.00	38.00
H-233. FOR LEAD AND IRON PIPE, NICKEL PLATED — PER DOZEN	14.00	15.50	17.50	25.50	41.00
H-234. FOR IRON PIPE, FINISHED — PER DOZEN	13.00	14.00	16.00	24.00	40.00
H-234. FOR IRON PIPE, NICKEL PLATED — PER DOZEN	15.00	16.50	18.50	26.50	43.00



H-235. SILL COCK.

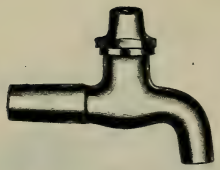


H-236. SILL COCK, LOOSE KEY.

COMPRESSION SILL COCKS.—H-235 and H-236.

SIZE — INCHES	½	¾
H-235. FINISHED — PER DOZEN	28.00	28.09
H-235. NICKEL PLATED — PER DOZEN	32.00	32.00
H-236. FINISHED, LOOSE KEY — PER DOZEN	34.00	34.00
H-236. NICKEL PLATED, LOOSE KEY — PER DOZEN	38.00	38.00

COMPRESSION WORK.



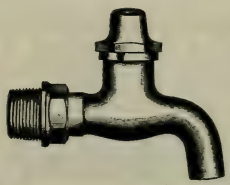
H-240. PLAIN BIBB FOR LEAD PIPE, LOOSE KEY.



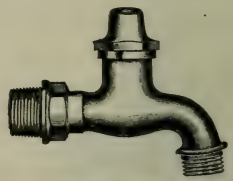
H-241. HOSE BIBB FOR LEAD PIPE, LOOSE KEY.

COMPRESSION BIBBS WITH LOOSE KEY, FOR LEAD PIPE.

SIZE . . . . . INCHES	½	⅝	¾	1
H-240. FINISHED . . . . . PER DOZEN	17.00	19.00	25.00	42.00
H-240. NICKEL PLATED . . . . . PER DOZEN	19.50	21.50	27.50	45.00
H-241. FINISHED . . . . . PER DOZEN	19.00	21.00	27.00	45.00
H-241. NICKEL PLATED . . . . . PER DOZEN	21.50	23.50	29.50	48.00



H-242. FOR IRON PIPE, LOOSE KEY.



H-243. FOR IRON PIPE, LOOSE KEY.

COMPRESSION BIBBS WITH LOOSE KEY, FOR IRON PIPE.

SIZE . . . . . INCHES	½	⅝	¾	1
H-242. FINISHED . . . . . PER DOZEN	19.00	21.00	27.00	45.00
H-242. NICKEL PLATED . . . . . PER DOZEN	21.50	23.50	29.50	48.00
H-243. FINISHED . . . . . PER DOZEN	21.00	23.00	29.00	48.00
H-243. NICKEL PLATED . . . . . PER DOZEN	23.50	25.50	31.50	51.00



H-246. LOOSE KEY, FOR LEAD PIPE.



H-247. LOOSE KEY, FOR IRON PIPE.

COMPRESSION STOPS WITH LOOSE KEY.

SIZE . . . . . INCHES	½	⅝	¾	1
H-246. FINISHED . . . . . PER DOZEN	18.00	20.00	28.00	44.00
H-246. NICKEL PLATED . . . . . PER DOZEN	20.50	22.50	30.50	47.00
H-247. FINISHED . . . . . PER DOZEN	20.00	22.00	31.00	48.00
H-247. NICKEL PLATED . . . . . PER DOZEN	22.50	24.50	33.50	51.00

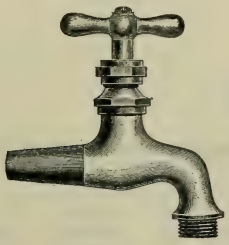
For Stuffing Boxes add to regular list, per dozen, ½ and ⅝ inch, $2.00; ¾ inch, $3.00; 1 inch, $4.00.

IMPROVED COMPRESSION BIBBS.

WITH STUFFING BOX.



H-251. PLAIN BIBB, L. P.



H-252. HOSE BIBB, L. P.



H-253. PLAIN BIBB, I. P.

COMPRESSION BIBBS, WITH STUFFING BOX.

SIZE . . . . . INCHES	½	⅝	¾	1
H-251. PLAIN BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	13.00	15.00	21.00	38.00
H-251. PLAIN BIBBS, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	15.50	17.50	23.50	41.00
H-252. HOSE BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	15.00	17.00	23.00	41.00
H-252. HOSE BIBBS, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	17.50	19.50	25.50	44.00
H-253. PLAIN BIBBS, IRON PIPE, FINISHED . . . . . PER DOZEN	15.00	17.00	23.00	41.00
H-253. PLAIN BIBBS, IRON PIPE, NICKEL PLATED . . . . . PER DOZEN	17.50	19.50	25.50	44.00



H-257. HOSE BIBB, I. P.



H-258. PLAIN STOP, L. P.



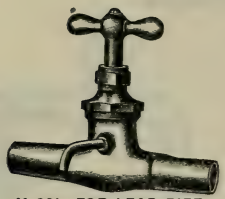
H-259. PLAIN STOP, I. P.

COMPRESSION BIBBS AND STOPS, WITH STUFFING BOX.

SIZE . . . . . INCHES	⅜	½	⅝	¾	1
H-257. HOSE BIBBS, IRON PIPE, FINISHED . . . . . PER DOZEN	-----	17.00	19.00	25.00	44.00
H-257. HOSE BIBBS, IRON PIPE, NICKEL PLATED . . . . . PER DOZEN	-----	19.50	21.50	27.50	47.00
H-258. PLAIN STOPS, LEAD PIPE, FINISHED . . . . . PER DOZEN	13.00	14.00	16.00	25.00	40.00
H-258. PLAIN STOPS, LEAD PIPE, NICKEL PLATED . . . . PER DOZEN	15.00	16.50	18.50	27.50	43.00
H-259. PLAIN STOPS, IRON PIPE, FINISHED . . . . . PER DOZEN	15.00	16.00	18.00	27.00	44.00
H-259. PLAIN STOPS, IRON PIPE, NICKEL PLATED . . . . . PER DOZEN	17.50	18.50	20.50	29.50	47.00

IMPROVED COMPRESSION STOPS.

WITH STUFFING BOX



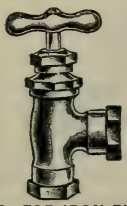
H-261. FOR LEAD PIPE.



H-262. FOR IRON PIPE.

COMPRESSION SHOWER COCKS WITH STUFFING BOX.

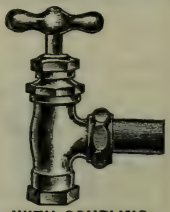
SIZE ..... INCHES	½	⅝	¾	1
H-261. FINISHED ..... PER DOZEN	16.50	19.50	27.00	44.00
H-261. NICKEL PLATED ..... PER DOZEN	19.00	22.00	29.50	47.00
H-262. FINISHED ..... PER DOZEN	18.50	21.50	29.00	48.00
H-262. NICKEL PLATED ..... PER DOZEN	21.00	24.00	31.50	51.00



H-263. FOR IRON PIPE.



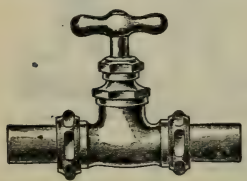
*H-264. ORNAMENTAL ANGLE STOP.



H-265. WITH COUPLING.

COMPRESSION ANGLE COCKS WITH STUFFING BOX.

SIZE ..... EACH	⅜	½	¾
H-263. FINISHED ..... PER DOZEN	15.00	16.00	27.00
H-263. NICKEL PLATED ..... PER DOZEN	17.50	18.50	29.50
H-265. FINISHED ..... PER DOZEN	20.00	21.00	35.00
H-265. NICKEL PLATED ..... PER DOZEN	23.00	24.00	38.50



H-270. WITH COUPLINGS.



*H-271. LAVATORY STOP.



H-272. WITH LOOSE KEY.

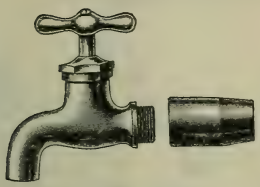
COMPRESSION UNION AND ANGLE STOPS.

SIZE ..... INCHES	⅜	½	⅝	¾	1
H-270. FINISHED ..... PER DOZEN	-----	24.00	30.00	43.50	60.00
H-270. NICKEL PLATED ..... PER DOZEN	-----	27.00	33.00	47.00	65.00
H-272. FINISHED ..... PER DOZEN	21.00	22.00	-----	34.00	-----
H-272. NICKEL PLATED ..... PER DOZEN	23.50	24.50	-----	35.50	-----

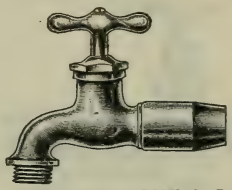
H-272 can be furnished with coupling at special price.

*For Ornamental Angle and Lavatory Stops, H-264 and H-271, add to list of H-263, $4.00.

COMPRESSION BIBBS, DETACHABLE SHANKS.



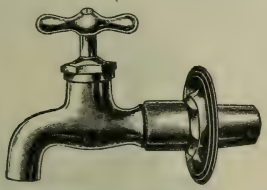
H-273. PLAIN BIBB, L. P.



H-274. HOSE BIBB, L. P.

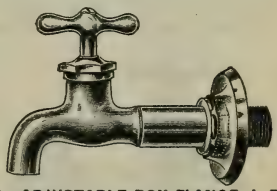
COMPRESSION BIBBS WITH DETACHABLE SHANK.—H-273 and H-274.

SIZE . . . . . INCHES	½	⅝	¾
H-273. PLAIN BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	16.00	18.00	23.00
H-273. PLAIN BIBBS, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	18.50	20.50	25.50
H-274. HOSE BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	18.00	20.00	25.00
H-274. HOSE BIBBS, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	20.50	22.50	27.50



H-281. LOOSE FLANGE, L. P.

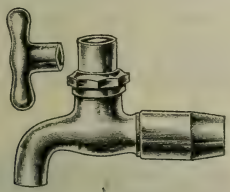
CLOW © SPECIAL



H-282. ADJUSTABLE BOX FLANGE, I. P.

COMPRESSION BIBBS WITH DETACHABLE SHANK.—H-281 and H-282.

SIZE . . . . . INCHES	½	⅝	¾
H-281. PLAIN BIBBS, LOOSE FLANGE, LEAD PIPE, FINISHED . . . . PER DOZEN	19.00	21.00	26.00
H-281. PLAIN BIBBS, LOOSE FLANGE, LEAD PIPE, NICKEL PLATED . PER DOZEN	23.00	25.00	30.00
H-282. PLAIN BIBBS, ADJ. BOX FLANGE, IRON PIPE, FINISHED . . . PER DOZEN	22.00	24.00	29.00
H-282. PLAIN BIBBS, ADJ. BOX FLANGE, IRON PIPE, NICKEL PLATED PER DOZEN	26.00	28.00	33.00



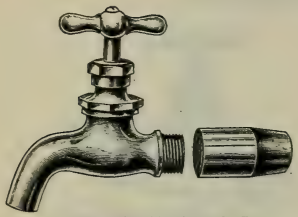
H-286. LOOSE KEY, L. P.



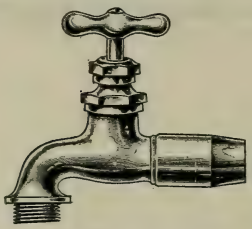
H-287. WASH TRAY BIBB, L. P.

COMPRESSION BIBBS WITH DETACHABLE SHANK.—H-286 and H-287.

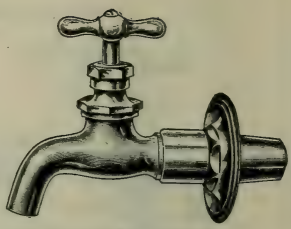
SIZE . . . . . INCHES	½	⅝	¾
H-286. PLAIN BIBBS, LOOSE KEY, LEAD PIPE, FINISHED . . . . . PER DOZEN	22.00	24.00	30.00
H-286. PLAIN BIBBS, LOOSE KEY, LEAD PIPE, NICKEL PLATED . . . PER DOZEN	24.50	26.50	32.50
H-287. PLAIN WASH TRAY BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	17.00	19.00	24.00
H-287. PLAIN WASH TRAY BIBBS, LEAD PIPE, NICKEL PLATED . . PER DOZEN	19.50	21.50	26.50



H-290. PLAIN BIBB, L. P.



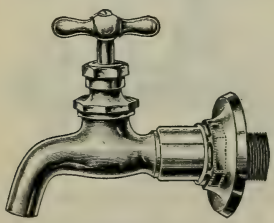
H-291. HOSE BIBB, L. P.



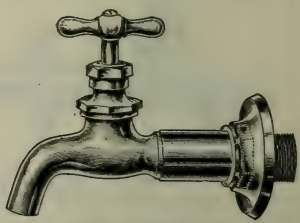
H-293. LOOSE FLANGE, L. P.

IMPROVED COMPRESSION BIBBS, DETACHABLE SHANK.

SIZE . . . . . INCHES	½	⅝	¾
H-290. PLAIN BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	18.00	20.00	26.00
H-290. PLAIN BIBBS, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	20.50	22.50	28.50
H-291. HOSE BIBBS, LEAD PIPE, FINISHED . . . . . PER DOZEN	20.00	22.00	28.00
H-291. HOSE BIBBS, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	22.50	24.50	31.50
H-293. PLAIN BIBBS, LOOSE FLANGE, LEAD PIPE, FINISHED . . . . . PER DOZEN	21.00	23.00	29.00
H-293. PLAIN BIBBS, LOOSE FLANGE, LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	25.00	27.00	33.00



H-295. ADJUSTABLE BOX FLANGE, I. P.



H-296. LONG SHANK, ADJUSTABLE BOX FLANGE, I. P.

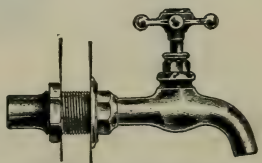
IMPROVED COMPRESSION BIBBS, DETACHABLE SHANK.

SIZE . . . . . INCHES	½	⅝	¾
H-295. PLAIN BIBBS, LOOSE RECESS FLANGE, I. P., FINISHED . . . . . PER DOZEN	24.00	26.00	32.00
H-295. PLAIN BIBBS, LOOSE RECESS FLANGE, IRON PIPE, NICKEL PLATED . . . PER DOZEN	28.00	30.00	36.00
H-296. PLAIN BIBBS, LONG SHANK, ADJUSTABLE BOX FLANGE, I. P., FINISHED . PER DOZEN	27.00	29.00	35.00
H-296. PLAIN BIBBS, LONG SHANK, ADJ. BOX FLANGE, I. P., NICKEL PLATED . . PER DOZEN	31.00	33.00	39.00



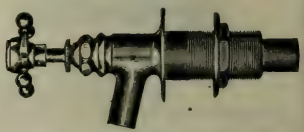
H-297. COMPRESSION SINK BIBB, CHINA TOP.

⅜-inch, for ¼-inch Iron Pipe, Finished or Nickel Plated.
Per dozen, $17.50.
If with Hose End, add, per doz., $2.40.



H-298. COMPRESSION SINK BIBB, CHINA TOP, FLANGE THIMBLE AND LOCKNUT.

⅜-inch, for ¼-inch Iron Pipe, Finished or Nickel Plated.
Per dozen, $21.00.



H-299. COMPRESSION WASH TRAY BIBB, CHINA TOP, FLANGE THIMBLE AND LOCKNUT.

⅜-inch, for ¼-inch Iron Pipe, Finished or Nickel Plated.
Per dozen, $21.00.

COMPRESSION BASIN, PANTRY AND BATH COCKS.



H-307. No. 1.
TEE HANDLE BASIN COCKS.
Nickel plated - per dozen, 19.00



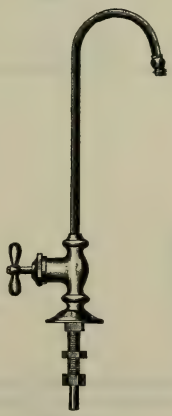
H-308. No. 1.
CROSS HANDLE BASIN COCKS.
Nickel plated - per dozen, 20.00



H-309. No. 1.
CROSS HANDLE BASIN COCKS WITH STUFFING BOX.
Nickel plated - per dozen, 22.00



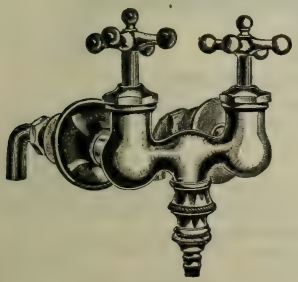
H-312.
LOW DOWN BASIN COCKS.
China name plate. Finished or nickel plated - - per dozen, 50.00
N.P. Couplings for Female ⅜-inch Iron Pipe, add - per dozen, 6.00



H-320.
PANTRY COCK.
Nickel plated, per dozen, 34.00
If with ball wheel handle and china center, add - - per dozen, 6.00



H-314.
BALL WHEEL HANDLE BASIN COCK.
China name plate. Finished or nickel plated - - per dozen, 75.00
N.P. Couplings for Female ⅜-inch Iron Pipe, add - per dozen, 6.00

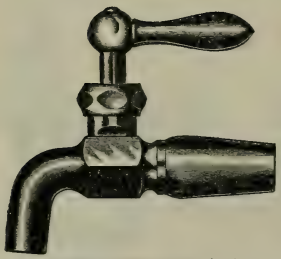


H-322.
DOUBLE BATH COCK.
Nickel plated - - - - each, 7.00

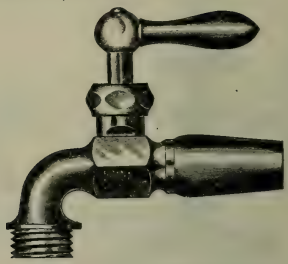


H-324.
DOUBLE BATH COCK WITH RING CUP.
Nickel plated - - - - each, 8.00

FULLER BIBBS.



H-331. PLAIN BIBB, L. P.



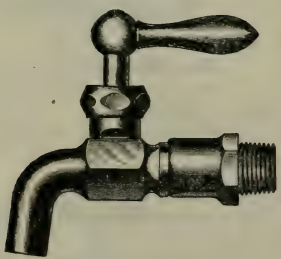
H-332. HOSE BIBB, L. P.

FULLER PLAIN BIBBS, FOR LEAD PIPE.—H-331.

SIZE ... INCHES	½	⅝	¾	1
FINISHED ... PER DOZEN	18.00	20.00	26.00	36.00
NICKEL-PLATED ... PER DOZEN	22.00	24.00	32.00	46.00

FULLER HOSE BIBBS, FOR LEAD PIPE.—H-332.

SIZE ... INCHES	½	⅝	¾	1
FINISHED ... PER DOZEN	21.00	24.00	30.00	40.00
NICKEL-PLATED ... PER DOZEN	25.00	28.00	36.00	50.00



H-335. PLAIN BIBB, I. P.



H-336. HOSE BIBB, I. P.

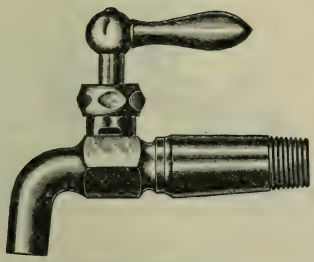
FULLER PLAIN BIBBS, FOR IRON PIPE.—H-335.

SIZE ... INCHES	½	⅝	¾	1
FINISHED ... PER DOZEN	21.00	24.00	30.00	40.00
NICKEL-PLATED ... PER DOZEN	25.00	28.00	36.00	50.00

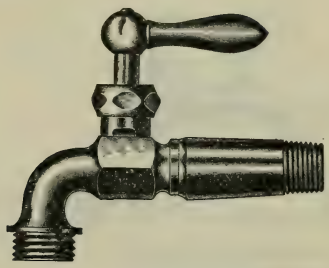
FULLER HOSE BIBBS, FOR IRON PIPE.—H-336.

SIZE ... INCHES	½	⅝	¾	1
FINISHED ... PER DOZEN	24.00	28.00	34.00	44.00
NICKEL-PLATED ... PER DOZEN	28.00	32.00	40.00	54.00

FULLER BIBBS.



H-341. PLAIN BIBB, I. P.



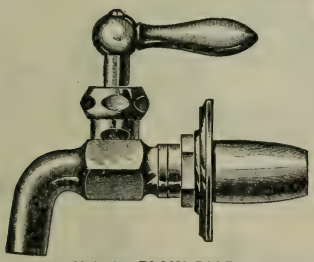
H-342. HOSE BIBB, I. P.

FULLER PLAIN BIBBS, FOR IRON PIPE, WITHOUT SHOULDER.—H-341.

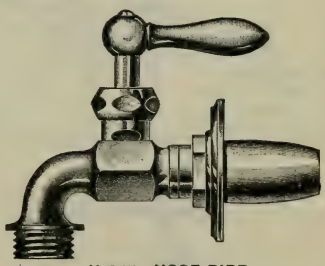
SIZE — INCHES	½	⅝	¾	1
FINISHED — PER DOZEN	21.00	24.00	30.00	40.00
NICKEL-PLATED — PER DOZEN	25.00	28.00	36.00	50.00

FULLER HOSE BIBBS, FOR IRON PIPE, WITHOUT SHOULDER.—H-342.

SIZE — INCHES	½	⅝	¾	1
FINISHED — PER DOZEN	24.00	28.00	34.00	44.00
NICKEL-PLATED — PER DOZEN	28.00	32.00	40.00	54.00



H-346. PLAIN BIBB.



H-347. HOSE BIBB.

FULLER PLAIN BIBBS, ADJUSTABLE FLANGE AND THIMBLE.—H-346.

SIZE — INCHES	⅜	½	⅝	¾	1
FINISHED — PER DOZEN	23.00	26.00	28.00	36.00	48.00
NICKEL-PLATED — PER DOZEN	28.00	32.00	34.00	42.00	58.00

FULLER HOSE BIBBS, ADJUSTABLE FLANGE AND THIMBLE.—H-347.

SIZE — INCHES	⅜	½	⅝	¾	1
FINISHED — PER DOZEN	26.00	29.00	32.00	40.00	52.00
NICKEL-PLATED — PER DOZEN	31.00	35.00	38.00	46.00	62.00

FULLER BIBBS.



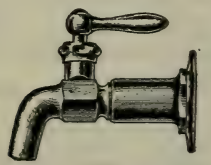
H-351. PLAIN BIBB I. P.



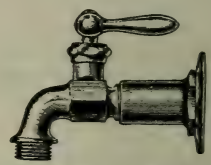
H-352 HOSE BIBB I. P.

FULLER BIBBS WITH SOLID FLANGE, FOR IRON PIPE.

SIZE . . . . . INCHES	½	⅝	¾	1
H-351. FINISHED . . . . . PER DOZEN	23.50	25.50	33.00	44.00
H-351. NICKEL PLATED . . . . . PER DOZEN	29.50	31.50	39.00	54.00
H-352. FINISHED . . . . . PER DOZEN	26.50	29.50	37.00	48.00
H-352. NICKEL PLATED . . . . . PER DOZEN	32.50	35.50	43.00	58.00



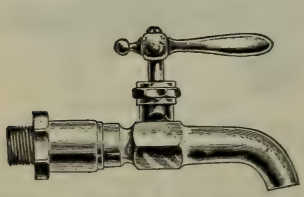
H-357. PLAIN BIBB I. P.



H-358. HOSE BIBB I. P.

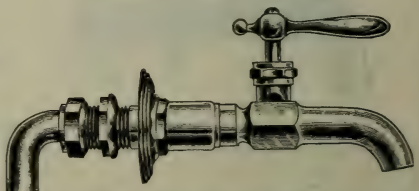
FULLER BIBBS WITH SOLID FLANGE, INSIDE THREADS.

SIZE . . . . . INCHES	½	⅝	¾	1
H-357. FINISHED . . . . . PER DOZEN	23.50	25.50	33.00	44.00
H-357. NICKEL PLATED . . . . . PER DOZEN	29.50	31.50	39.00	54.00
H-358. FINISHED . . . . . PER DOZEN	26.50	29.50	37.00	48.00
H-358. NICKEL PLATED . . . . . PER DOZEN	32.50	35.50	43.00	58.00



H-361. EXTRA LONG SINK BIBB.

CLOW © SPECIAL



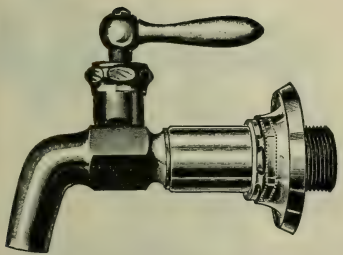
H-363. EXTRA LONG SINK BIBB, WITH FLANGE, LOCKNUT AND COUPLING.

CLOW EXTRA LONG SINK BIBBS.—H-361 and H-363.

H-361. FINISHED OR NICKEL PLATED, ¾-INCH . . . . . PER DOZEN	40.00
H-363. FINISHED OR NICKEL PLATED, ¾-INCH . . . . . PER DOZEN	45.00

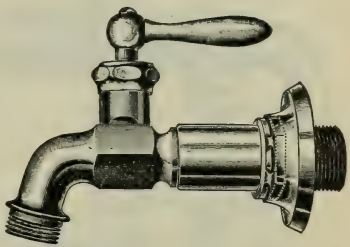
These Sink Bibbs are made extra heavy and are especially adapted for use on Slate, Marble or Solid Porcelain Sinks. They have full water way and are thoroughly guaranteed.

FULLER BIBBS.



H-366. PLAIN BIBB, WITH ADJUSTABLE BOX FLANGE, I. P.

CLOW © SPECIAL



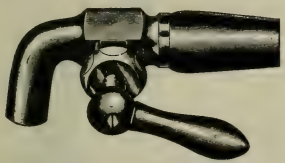
H-368. HOSE BIBB, WITH ADJUSTABLE BOX FLANGE, I. P.

FULLER PLAIN BIBBS, WITH ADJUSTABLE BOX FLANGE, FOR IRON PIPE.—H-366.

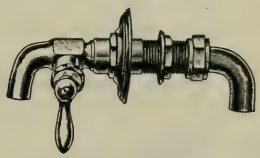
SIZE . . . . . INCHES	½	⅝	¾
FINISHED . . . . . PER DOZEN	32.00	36.00	46.00
NICKEL PLATED . . . . . PER DOZEN	38.00	42.00	52.00

FULLER HOSE BIBBS, WITH ADJUSTABLE BOX FLANGE, FOR IRON PIPE.—H-368.

SIZE . . . . . INCHES	½	⅝	¾
FINISHED . . . . . PER DOZEN	35.00	40.00	50.00
NICKEL PLATED . . . . . PER DOZEN	41.00	46.00	56.00



H-370. WASH TRAY BIBB, L. P.



H-372. WASH TRAY BIBB, WITH FLANGE, LOCKNUT AND COUPLING.

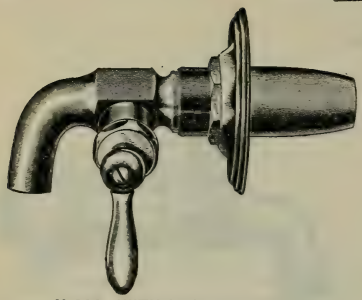
FULLER WASH TRAY BIBBS.

SIZE . . . . . INCHES	½	⅝	¾	1
FOR LEAD PIPE, FINISHED . . . . . PER DOZEN	20.00	22.50	30.00	40.00
FOR LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	24.00	26.50	36.00	50.00
FOR IRON PIPE (NOT ILLUSTRATED), FINISHED . . . . . PER DOZEN	23.00	26.50	34.00	44.00
FOR IRON PIPE (NOT ILLUSTRATED), NICKEL PLATED . . . . . PER DOZEN	27.00	30.50	40.00	54.00

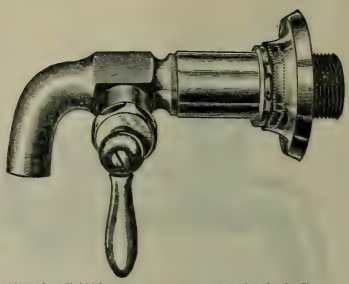
FULLER WASH TRAY BIBBS, LOOSE FLANGE.—H-372
WITH LOCKNUT AND BENT COUPLING.

SIZE . . . . . INCHES	⅝	¾	1
FINISHED . . . . . PER DOZEN	40.00	54.00	74.00
NICKEL PLATED . . . . . PER DOZEN	46.00	60.00	84.00

H-372 can be furnished with extra long shanks if desired.



CLOW © SPECIAL



H-380. WITH LOOSE FLANGE, L. P.

H-382. WITH ADJUSTABLE BOX FLANGE, I. P.

FULLER WASH TRAY BIBBS WITH ADJUSTABLE FLANGE.

SIZE — INCHES	½	⅝	¾	1
H-380. LEAD PIPE, LOOSE FLANGE, FINISHED — PER DOZEN	26.00	28.00	36.00	50.00
H-380. LEAD PIPE, LOOSE FLANGE, NICKEL PLATED — PER DOZEN	32.00	34.00	42.00	60.00
H-382. IRON PIPE, ADJUSTABLE BOX FLANGE, FINISHED — PER DOZEN	29.00	32.00	40.00	54.00
H-382. IRON PIPE, ADJUSTABLE BOX FLANGE, NICKEL PLATED — PER DOZEN	35.00	38.00	46.00	64.00

If with extra long shank, add to list, per dozen, ½ and ⅝-inch, $4.00; ¾ and 1-inch, $6.00.



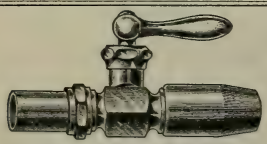
H-386. OUTSIDE THREAD.



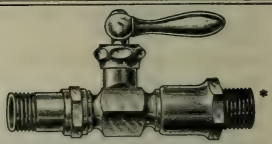
H-388. INSIDE THREAD.

FULLER WASH TRAY BIBBS WITH SOLID FLANGE.—H-386 and H-388.

SIZE — INCHES	½	⅝	¾	1
FINISHED — PER DOZEN	23.50	25.50	33.00	46.00
NICKEL PLATED — PER DOZEN	29.50	31.50	39.00	56.00



H-393. FOR LEAD PIPE.

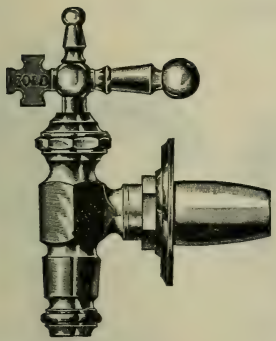


H-396. FOR IRON PIPE.

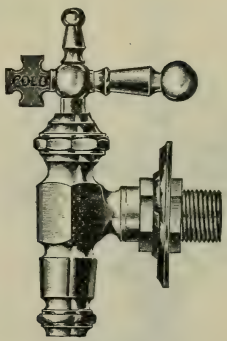
FULLER STOPS.—H-393 and H-396.

SIZE — INCHES	½	⅝	¾	1	1¼	1½	2
H-393. FOR LEAD PIPE, ROUGH — PER DOZEN	18.00	21.00	25.00	36.00	60.00	70.00	135.00
H-393. FOR LEAD PIPE, FINISHED — PER DOZEN	20.00	24.00	28.00	40.00	65.00	75.00	150.00
H-393. FOR LEAD PIPE, NICKEL PLATED — PER DOZEN	25.00	30.00	34.00	50.00	------	------	------
H-396. FOR IRON PIPE, ROUGH — PER DOZEN	19.00	23.00	27.00	39.00	64.00	76.00	145.00
H-396. FOR IRON PIPE, FINISHED — PER DOZEN	21.00	26.00	30.00	43.00	70.00	82.00	175.00
H-396. FOR IRON PIPE, NICKEL PLATED — PER DOZEN	26.00	32.00	36.00	53.00	------	------	------

*Pressure End.



H-401. FOR LEAD PIPE.



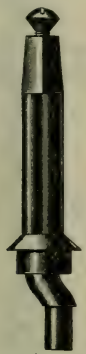
H-403. FOR IRON PIPE.

FULLER UPRIGHT BATH BIBBS, FLANGE, AND THIMBLE.—H-401.

SIZE — INCHES	½	⅝	¾	1
FINISHED — PER DOZEN	25.00	28.00	34.00	48.00
NICKEL-PLATED — PER DOZEN	31.00	34.00	40.00	56.00

FULLER UPRIGHT BATH BIBBS, WITH FLANGE, FOR IRON PIPE.—H-403.

SIZE — INCHES	½	⅝	¾	1
FINISHED — PER DOZEN	28.00	32.00	38.00	52.00
NICKEL-PLATED — PER DOZEN	34.00	38.00	44.00	60.00



H-408. ECCENTRIC.



H-410. RUBBER BALL.



H-414. BALL STEM WITH BALL.

FULLER WORK TRIMMINGS.—H-408, H-410 and H-414.

SIZE — INCHES	½	⅝	¾	1	1¼
H-408. ECCENTRICS — PER DOZEN	3.00	3.00	4.00	6.00	----
H-410. RUBBER BALLS — PER DOZEN	.75	.75	1.00	1.25	2.00
H-414. BALL STEM WITH BALL — PER DOZEN	3.00	3.00	4.00	6.00	----

FULLER BASIN COCKS.



H-418. NUMBER 0.



H-423. NUMBER 1.



H-425. NUMBER 6.

NUMBER	H-418, No. 0	H-423, No. 1	H-425, No. 6
NICKEL PLATED . . . . . PER DOZEN	40.00	40.00	60.00



H-440. NUMBER 4.



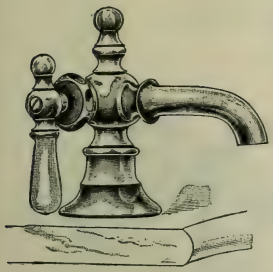
H-443. NUMBER 7.



H-445. CLOW SPECIAL, NUMBER 9.

NUMBER	H-440, No. 4	H-443, No. 7	H-445, No. 9
NICKEL PLATED . . . . . PER DOZEN	64.00	66.00	75.00

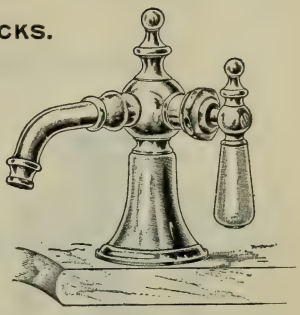
FULLER BASIN AND PANTRY COCKS.



H-450.
Number 0 Basin Cock with white China handle, nickel plated.
Per dozen, 60.00



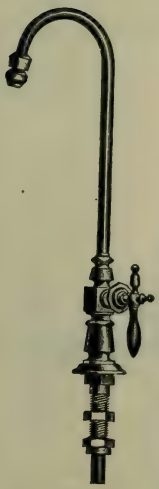
H-453.
Number 6 Basin Cock with white China handle, nickel plated.
Per dozen, 80.00.



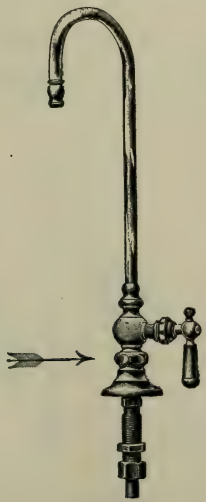
H-455.
Clow's Special Number 9 Basin Cock with white China handle, nickel plated.
Per dozen, 90.00.

Any of the above Basin Cocks can be furnished to order with Onyx, Agate, Pearl or Ebony handles.

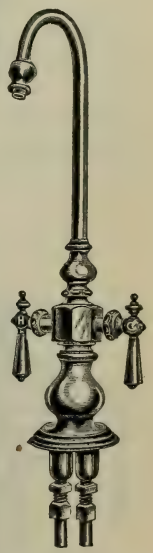
FULLER PANTRY COCKS.



H-458. NUMBER 1.



H-460. CLOW SPECIAL No. 6.

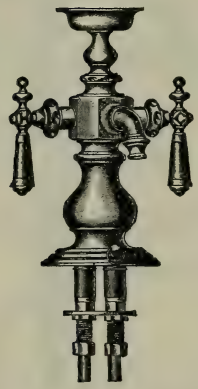


H-462.
NUMBER 9, DOUBLE.

NUMBER		H-458, No. 1	H-460, No. 6	H-462, No. 9
NICKEL PLATED	EACH	3.50	5.00	18.00
NICKEL PLATED WITH CHINA HANDLES	EACH	4.75	7.00	22.00

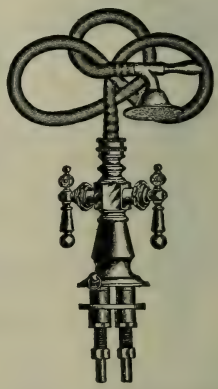
We call particular attention to our Clow Special Number 6 Pantry Cock. The union connection above the sink allows it to be easily disconnected when packing is required, overcoming the objection to the use of ordinary pantry cocks.

FULLER DOUBLE BASIN AND SHAMPOO COCKS.



H-465. DOUBLE BASIN COCK, No. 9.

Number 9, Nickel Plated . . . . . each, $20.00
Number 8 (not illustrated) . . . . . each, 13.00



H-468. DOUBLE SHAMPOO COCK, No. 8.

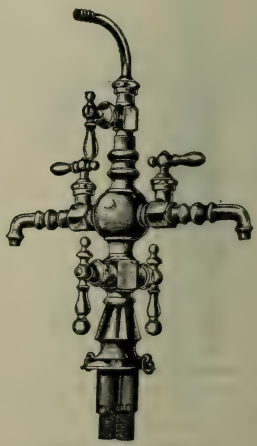
Number 8, Nickel Plated . . . . . each, $14.00
Number 9 (not illustrated) . . . . . each, 21.00



H-470.
COMBINATION BASIN AND SHAMPOO COCK.

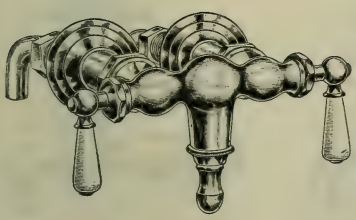
Nickel Plated . . . . . each, $12.50

CLOW © SPECIAL



H-473. COMBINATION
DOUBLE BASIN AND SHAMPOO COCK.

Nickel Plated . . . . . each, $15.00

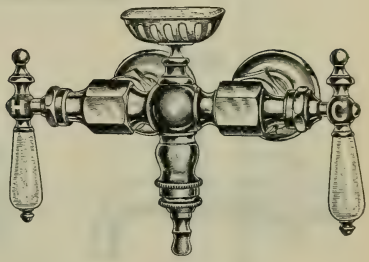


H-485.
NO. 2 FULLER BATH COCK.

Especially designed for Shampoo Attachment.

Each 15.00

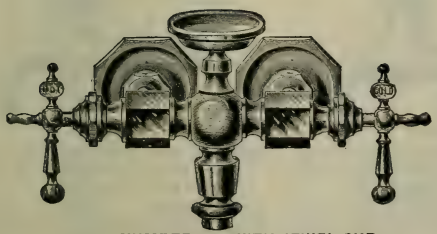
CLOW
SPECIAL



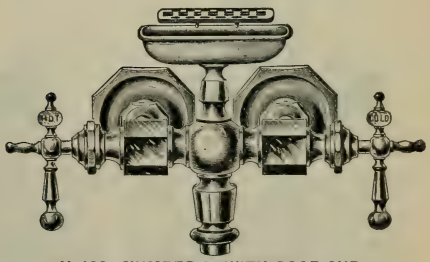
H-488.
CLOW SPECIAL NO. 3 BATH COCK.

With Perforated Soap Cup and China Tray, White China Engraved Handles.

Each 17.50



H-497. NUMBER 4½, WITH JEWEL CUP.



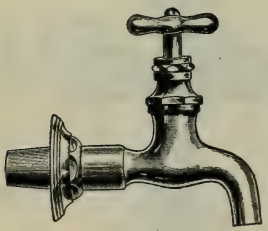
H-499. NUMBER 5, WITH SOAP CUP, REMOVABLE TRAY.

FULLER COMBINATION BATH COCKS.—H-497 and H-499.

FIGURE	H-497	H-499
NICKEL PLATED . . . . . EACH	12.00	16.50

CLOW SPECIAL SELF-CLOSING BIBBS.

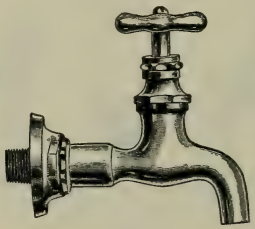
ADAPTED FOR HIGH PRESSURES. IN ORDERING STATE WATER PRESSURE AND BIBBS WILL BE ADJUSTED FOR THAT PRESSURE.



H-505.

Bibb for Lead Pipe with Detachable Shank and Adjustable Flange.

⅝-inch, Finished, per doz., 41.00
⅝-inch, Nickel Plated, per doz., 45.00



H-507.

Bibb for Iron Pipe with Detachable Shank and Box Flange.

⅝-inch, Finished, per doz., 44.00
⅝-inch, Nickel Plated, per doz., 48.00



H-509.

Bibb for Iron Pipe with Detachable Shank, Box Flange and Ball Wheel Handle with China Center.

⅝-inch, Finished, per doz., 50.00
⅝-inch, Nickel Plated, per doz., 54.00

CLOW
SPECIAL



H-512.

Bibb for Iron Pipe, Outside Thread with Solid Flange and Ball Wheel Handle with China Center.

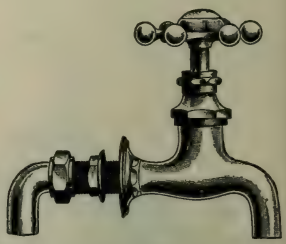
½-inch, Finished, per doz., 38.00
½-inch, Nickel Plated, per doz., 42.00
⅝-inch, Finished, per doz., 41.00
⅝-inch, Nickel Plated, per doz., 45.00



H-514.

Bibb for Iron Pipe, Inside Thread, Solid Flange and Ball Wheel Handle with China Center.

½-inch, Finished, per doz., 38.00
½-inch, Nickel Plated, per doz., 42.00
⅝-inch, Finished, per doz., 41.00
⅝-inch, Nickel Plated, per doz., 45.00



H-518.

Bibb with Solid Flange Locknut and Bent Coupling and Ball Wheel Handle with China Center.

⅝-inch, Finished, per doz., 56.00
⅝-inch, Nickel Plated, per doz., 62.00

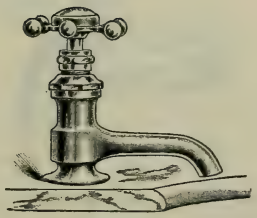
To adjust Clow Self-closing Bibbs and Basin Cocks for heavier pressure, unscrew top Cap and disengage it from the quadruple thread on the Stem; turn Cap to right until it catches the next thread on the Stem, then put together and a stronger spring will be had. For light pressure proceed as for heavy, only turn Cap to left. Adjustment may thus be had for pressure from 10 to 150 pounds without removing the spring. On account of the way it is inserted, the Spring cannot be weakened by use, and there is no pressure upon it until the Handle is turned, therefore the water pressure cannot compress the Spring or cause leakage.



H-524.

Clow Special Self-closing Basin Cock with Ball Wheel Handle and China Center.

Nickel Plated, . per dozen, 54.00



H-527.

Clow Low-down Self-closing Basin Cock with Ball Wheel Handle and China Center.

Nickel Plated, . per dozen, 54.00



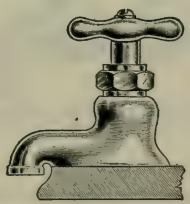
H-530.

Clow Special Self-closing Pantry Cock with Ball Wheel Handle and China Center.

Nickel Plated, . per dozen, 70.00



H-550. BASIN COCK.



H-555. LOW-DOWN PATTERN.



H-560. PANTRY COCK.

BOSTON SELF-CLOSING COCKS.—H-550, H-555 and H-560.

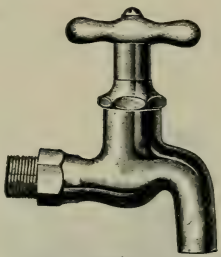
FIGURE	H-550	H-555	H-560
NICKEL PLATED . . . . . PER DOZEN	48.00	48.00	64.00

If with Ball Wheel Handle, add, per dozen, $6.00.

BOSTON SELF-CLOSING BIBBS.



H-575. PLAIN BIBB, L. P.



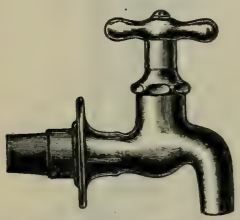
H-577. PLAIN BIBB, I. P.



H-579. DETACHABLE SHANK.

BOSTON SELF-CLOSING PLAIN BIBBS.

SIZE . . . . . INCHES	⅜	½	⅝
H-575. FINISHED . . . . . PER DOZEN	21.00	24.00	27.00
H-575. NICKEL PLATED . . . . . PER DOZEN	25.00	28.00	31.00
H-577. FINISHED . . . . . PER DOZEN	25.00	28.00	31.00
H-577. NICKEL PLATED . . . . . PER DOZEN	29.00	32.00	35.00
H-579. FINISHED. . . . . PER DOZEN	------	------	38.00
H-579. NICKEL PLATED . . . . . PER DOZEN	------	------	42.00



H-585. WITH FLANGE AND THIMBLE.



H-587. OUTSIDE THREAD.



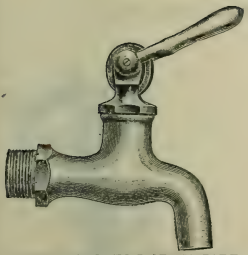
H-589. INSIDE THREAD.

BOSTON SELF-CLOSING PLAIN BIBBS WITH SOLID FLANGE.

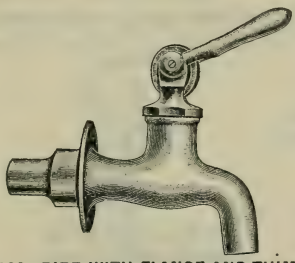
SIZE . . . . . INCHES	½	⅝
H-585. FINISHED . . . . . PER DOZEN	36.00	39.00
H-585. NICKEL PLATED . . . . . PER DOZEN	40.00	43.00
H-587. FINISHED . . . . . PER DOZEN	32.00	35.00
H-587. NICKEL PLATED . . . . . PER DOZEN	36.00	39.00
H-589. FINISHED . . . . . PER DOZEN	32.00	35.00
H-589. NICKEL PLATED . . . . . PER DOZEN	36.00	39.00

Add for Hose Ends on above Bibbs, per dozen, $4.00.

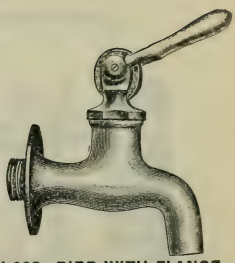
BROUGHTON SELF-CLOSING BIBBS.



H-600. BIBB FOR IRON PIPE.



H-602. BIBB WITH FLANGE AND THIMBLE.



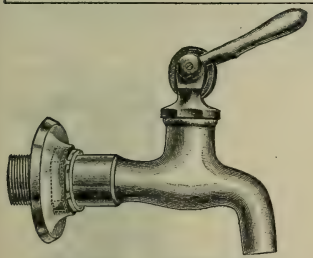
H-603. BIBB WITH FLANGE.

BROUGHTON PLAIN BIBBS, FOR IRON PIPE.—H-600.

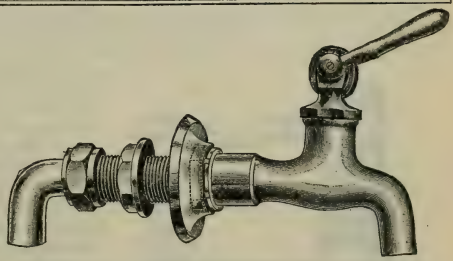
SIZE . . . . . INCHES	½	⅝	¾
FINISHED . . . . . PER DOZEN	28.00	31.00	34.00
NICKEL PLATED . . . . . PER DOZEN	31.00	34.00	37.00
SILVER PLATED . . . . . PER DOZEN	46.00	55.00	58.00
SOLID SILVER-METAL . . . . . PER DOZEN	54.00	64.00	69.00

BROUGHTON PLAIN BIBBS, WITH SOLID FLANGES.—H-602 and H-603.

SIZE . . . . . INCHES	½	⅝	¾
FINISHED . . . . . PER DOZEN	36.00	39.00	42.00
NICKEL PLATED . . . . . PER DOZEN	39.00	42.00	45.00
SILVER PLATED . . . . . PER DOZEN	54.00	63.00	66.00
SOLID SILVER-METAL . . . . . PER DOZEN	62.00	72.00	77.00



H-607. WITH ADJ. BOX FLANGE.



H-609. WITH FLANGE, LOCKNUT AND COUPLING.

BROUGHTON BIBBS WITH ADJUSTABLE BOX FLANGE, FOR IRON PIPE.—H-607.

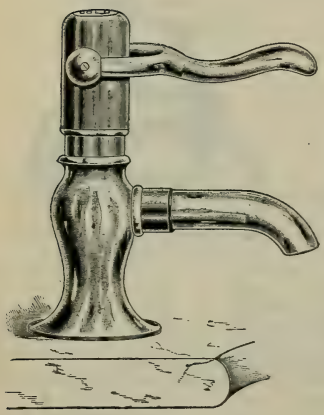
SIZE . . . . . INCHES	⅝	¾
FINISHED . . . . . PER DOZEN	41.00	46.00
NICKEL PLATED . . . . . PER DOZEN	44.00	49.00
SILVER PLATED . . . . . PER DOZEN	65.00	70.00
SOLID SILVER METAL . . . . . PER DOZEN	74.00	81.00

BROUGHTON BIBBS WITH ADJUSTABLE BOX FLANGE, LOCKNUT AND COUPLING.—H-609.

SIZE . . . . . INCHES	⅝	¾
FINISHED . . . . . EACH	45.00	50.00
NICKEL PLATED . . . . . EACH	48.00	53.00
SILVER PLATED . . . . . EACH	69.00	74.00
SOLID SILVER METAL . . . . . EACH	78.00	85.00

IMPROVED BROUGHTON SELF-CLOSING BASIN COCKS.

PATENTED.

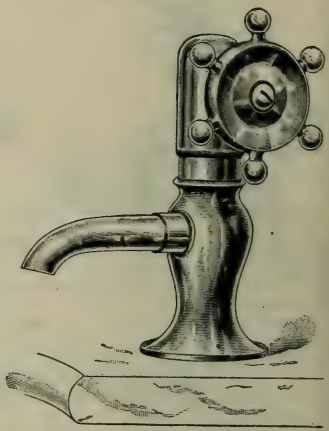


H-612. NUMBER 1.

The Broughton Self-Closing Work has been in use for several years. Many of the largest hotels and public buildings in the United States are equipped with it.

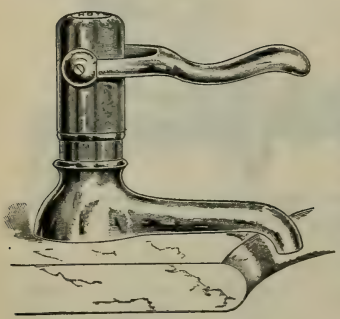
Made in Polished Brass, Nickel or Silver Plated, and in Solid Silver Metal.

EVERY ONE WARRANTED.



H-614. NUMBER 2.

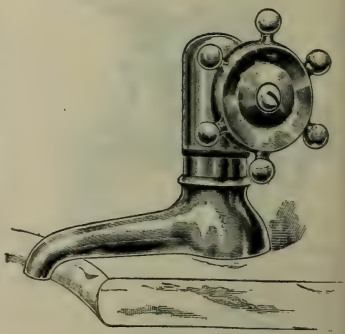
FINISH	Polished Brass.	Nickel Plated.	Silver Plated.	Solid Silver Metal.
PER DOZEN	48.00	51.00	63.00	69.00



H-617. NUMBER 3.

Upon request of many leading Architects and Plumbers we have designed the two new styles of Low-Down Self-Closing Basin Cocks illustrated in H-617 and H-619. In these Cocks are combined all the admirable features of the regular Broughton work, among which are High Grade Metal, Thorough Workmanship and Superior Finish.

Special circulars sent upon application.



H-619. NUMBER 4.

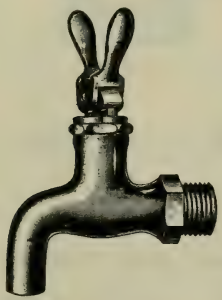
LOW-DOWN PATTERN.

FINISH	Polished Brass.	Nickel Plated.	Silver Plated.	Solid Silver Metal.
PER DOZEN	51.00	54.00	66.00	72.00

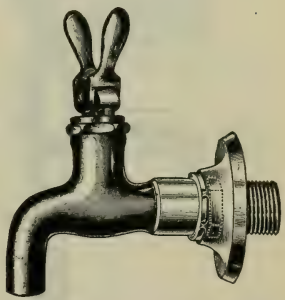
DOHERTY SELF-CLOSING WORK.



H-630. FOR LEAD PIPE



H-632. FOR IRON PIPE.

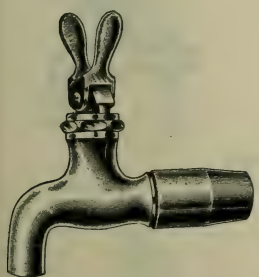


H-634. WITH ADJUSTABLE BOX FLANGE.

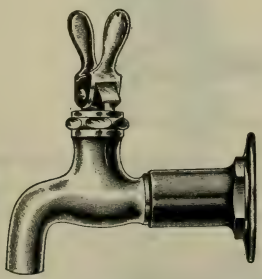
DOHERTY SELF-CLOSING BIBBS.—H-630, H-632 and H-634.

SIZE . . . . . INCHES	½	⅝
H-630. PLAIN BIBBS, FOR LEAD PIPE, FINISHED . . . . . PER DOZEN	24.00	27.00
H-630. PLAIN BIBBS, FOR LEAD PIPE, NICKEL PLATED . . . . . PER DOZEN	30.00	33.00
H-632. PLAIN BIBBS, FOR IRON PIPE, FINISHED . . . . . PER DOZEN	27.00	30.00
H-632. PLAIN BIBBS, FOR IRON PIPE, NICKEL PLATED . . . . . PER DOZEN	33.00	36.00
H-634. PLAIN BIBBS, I. P., WITH ADJUSTABLE BOX FLANGE, FINISHED . . . . PER DOZEN	-----	44.00
H-634. PLAIN BIBBS, I. P., WITH ADJUSTABLE BOX FLANGE, NICKEL PLATED . PER DOZEN	-----	48.00

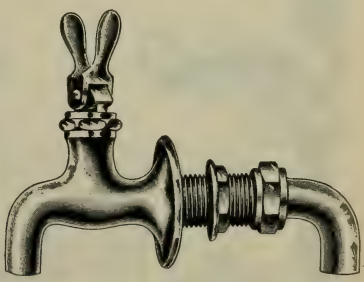
If with Flange and Thimble, add to list per dozen, ½-inch, 10.00; ⅝-inch, 10.50.



H-637. DETACHABLE SHANK PLAIN BIBB.



H-639. DETACHABLE SHANK BIBB WITH SOLID FLANGE, I. P.



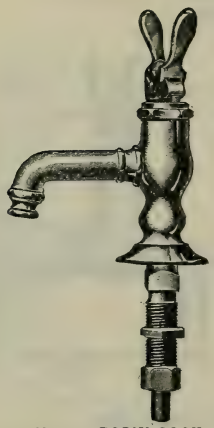
H-641. SOLID FLANGE LOCKNUT AND COUPLING.

⅝-inch, Lead Pipe.
Finished per dozen, $33.00
Nickel Plated, per dozen, 36.00

⅝-inch, for ¾ I. P.
Finished, per dozen, $38.00
Nickel Plated, per dozen, 42.00

⅝-inch, Lead Pipe.
Finished, per dozen, $48.50
Nickel Plated per dozen, 55.50

DOHERTY SELF-CLOSING WORK.



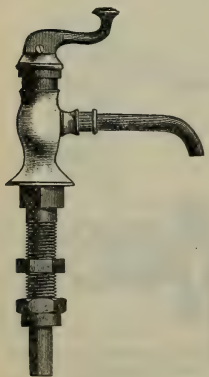
H-645. BASIN COCK.



H-647. PANTRY COCK.

DOHERTY SELF-CLOSING COCKS.—H-645 and H-647.

FIGURE	H-645	H-647
NICKEL PLATED . . . . . PER DOZEN	48.00	69.00



H-650. BASIN COCK.



H-653. PLAIN BIBB, L. P.



H-655. PLAIN BIBB, I. P.

TELEGRAPH PLAIN BIBBS.

SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
H-653. FINISHED . . . . . PER DOZEN	15.00	17.00	20.00	26.00
H-653. NICKEL PLATED . . . . . PER DOZEN	17.00	19.50	22.50	28.50
H-655. FINISHED . . . . . PER DOZEN	16.00	18.00	21.00	28.00
*H-655. NICKEL PLATED . . . . . PER DOZEN	18.00	20.50	23.50	30.50

TELEGRAPH BASIN COCKS.—H-650.

NICKEL PLATED . . . . . PER DOZEN	27.00



H-660.
Four-Arm Handle with Onyx, China or Nickel-Plated Arms.



H-661.
Ball Handle, with China Center.



H-662.
Tulip Handle, Brass, Nickel Plated.



H-666.
Fuller Ebony or Ivory Handle.



H-668.
Fuller Long China Handle.



H-670.
Fuller China Handle, marked "Hot" or "Cold."

Any of the above handles can be furnished for Basin or Bath Cocks at an additional price.

BASIN AND BATH COCK CONNECTIONS.



H-675.
Slip Joint Connection for Basin Cocks, $\frac{3}{8}$-inch I. P. thread.
Each 40



H-677.
Straight Slip Joint Connection for Basin Cocks, $\frac{3}{8}$-inch I. P. thread.
Each 40



H-679.
Female Ground Joint Basin Connection for $\frac{3}{8}$-inch Iron Pipe.
Each 40



H-681.
Male Ground Joint Basin Connection for $\frac{3}{8}$-inch Iron Pipe.
Each 40



H-685.
Female Ground Joint Bath Cock Connection for $\frac{1}{2}$-inch Iron Pipe.
Each 75



H-687.
Male Ground Joint Bath Cock Connection for $\frac{1}{2}$-inch Iron Pipe.
Each 75



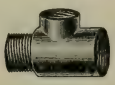
H-690.
Offset Ground Joint Bath Cock Connection for $\frac{1}{2}$-inch Iron Pipe.
Each 85



H-693.
Slip Joint Connection for tail piece on Basin Cocks to make $\frac{3}{8}$-inch Iron Pipe Connection
Each 50



H-695.
$\frac{1}{2}$-inch, Nickel Plated . each, $1.00
$\frac{3}{8}$-inch, Nickel Plated . each, 1.20



H-697.
$\frac{1}{2}$-inch, Nickel Plated . each, .75
$\frac{3}{8}$-inch, Nickel Plated . each, .85

Fig. H-695 is $3\frac{1}{4}$ inches long. H-697 is 2 inches long. These Connections are for Filter attachments to Bibbs.



J-5. UNDERWRITERS' HOSE PIPE.



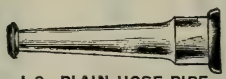
J-7. HOSE PIPE, SCREW TIP.

UNDERWRITERS' HOSE PIPES.—J-5.

SIZE — INCHES	2	2½	2½	2½
LENGTH — INCHES	20	24	30	36
WOUND AND PAINTED — EACH	9.00	11.00	12.00	15.00
PLAIN BRASS — EACH	7.50	9.50	11.00	13.50
WOUND AND PAINTED, WITHOUT HANDLES — EACH	6.50	8.50	10.00	12.50
RUBBER TUBE, SWIVEL HANDLES — EACH	----	----	15.00	18.00
LEATHER TUBES, SWIVEL HANDLES — EACH	----	----	----	18.00

HOSE PIPES, PLAIN, SCREW TIP.—J-7.

SIZE — INCHES	¾	¾	1	1	1¼	1¼	1½	1½	2	2	2½	2½
LENGTH — INCHES	8	12	8	12	12	15	12	15	12	20	15	24
PER DOZEN	8.00	10.00	10.00	12.00	20.00	24.00	25.00	30.00	38.00	50.00	75.00	100.00



J-9. PLAIN HOSE PIPE.



J-12. HOSE PIPE, COCK LARGE END.

PLAIN HOSE PIPES.—J-9.

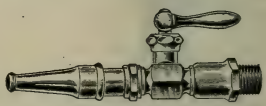
SIZE — INCHES	¾	1	1¼	1½	2	2½
LENGTH — INCHES	3	4	4¾	5¾	6¾	7½
HOSE THREAD — PER DOZEN	4.00	5.00	12.00	18.00	26.00	37.40
IRON PIPE THREAD — PER DOZEN	5.00	6.25	13.75	19.75	29.00	39.50

HOSE PIPES.—J-12.

SIZE — INCHES	¾	¾	1	1	1¼	1½	2
LENGTH — INCHES	8	12	8	12	20	20	20
PRICE — PER DOZEN	13.00	18.00	15.00	20.00	55.00	80.00	110.00



J-15. FULLER HOSE PIPE.



J-18. COACH HOSE PIPE.

FULLER HOSE PIPES.—J-15.

SIZE — INCHES	¾	1
PER DOZEN	18.00	30.00

COACH HOSE PIPES.—J-18.

SIZE — INCHES	½	¾	1
NICKEL PLATED — EACH	2.00	2.75	3.50



J-21. GEM HOSE PIPE

GEM HOSE PIPES.—J-21.

SIZE — INCHES	¾	1
PER DOZEN	10.00	15.00

Hose and Garden Valves, see page 113.

HOSE GOODS.



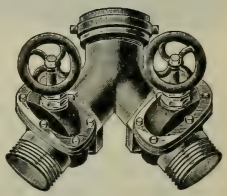
J-25. ONE 2½ MALE, TWO 2½ FEMALE LOOSE COUPLINGS.



J-26. TWO 2½ MALE, ONE 2½ FEMALE LOOSE COUPLING.



J-27. TWO 2½ MALE, ONE 4 FEMALE LOOSE COUPLING.



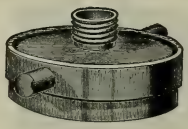
J-29. TWO 2½ MALE, ONE 4 FEMALE LOOSE COUPLING.

SIAMESE COUPLINGS.

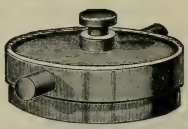
FIGURE	J-25	J-26	J-27	J-29
EACH	13.00	10.00	14.00	30.00



J-34. SUCTION HOSE STRAINER.



J-36. FIRE HYDRANT HOSE REDUCER.



J-38. HOSE CAP.

SUCTION HOSE STRAINERS (BRASS).—J-34.

SIZE INCHES	1½	2	2½	3	3½	4	4½	5	6
EACH	7.50	7.50	8.50	10.00	15.00	19.00	25.00	31.00	46.00

FIRE HYDRANT HOSE REDUCERS.—J-36.

SIZE INCHES	2½ x ¾	2½ x 1	2½ x 1¼	2½ x 1½	2½ x 2	3 x 2	3 x 2½
EACH	2.75	2.85	3.00	3.00	3.25	3.50	4.00

HOSE CAPS (BRASS).—J-38.

SIZE INCHES	¾	1	1¼	1½	2	2½
EACH	.35	.50	.70	.90	1.25	2.00

HOSE GOODS.



J-46. HOSE COUPLING.



J-48. STEAM HOSE COUPLING.



J-51. HOSE COUPLING WITH LUGS.

HOSE COUPLINGS.—J-46.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
PER DOZEN	2.40	2.40	4.40	10.00	14.00	24.00	48.00	75.00	-----	-----	-----	-----
IRON PIPE THREAD . . . PER DOZ.	2.65	2.65	4.65	10.50	15.00	26.00	50.00	76.00	120.00	150.00	250.00	350.00
FEMALE HALF HOSE-PIPE THREAD, PER DOZ.	1.80	1.80	3.00	7.20	9.60	16.20	31.80	50.00	-----	-----	-----	-----
FEMALE HALF IRON-PIPE THREAD, PER DOZ.	1.80	1.80	3.25	7.80	10.80	17.40	32.80	52.00	-----	-----	-----	-----

STEAM HOSE COUPLINGS.—J-48.

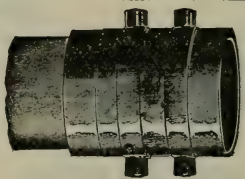
SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
STEAM COUPLINGS . . . . . EACH	1.25	1.25	1.50	2.00	2.50	3.50	6.00

HOSE COUPLINGS WITH LUGS.—J-51.

SIZES, IRON PIPE THREAD . . . . . INCHES	2	2½	3	3½	4
PRICE . . . . . PER DOZEN	32.00	50.00	76.00	120.00	150.00



J-54. TABER HOSE SPANNER.



J-58. AUTOMATIC HOSE COUPLING.



J-63. HOSE SPANNER, ONE EYE, MALLEABLE IRON.

AUTOMATIC HOSE COUPLINGS.—J-58.

SIZE . . . . . INCHES	1½	2	2½	3	3½	4	4½	5
PRICES . . . . . PER PAIR	2.00	2.50	3.00	10.50	12.00	15.00	18.00	21.00

In ordering Automatic Couplings, always give us the exact outside diameter of the hose. It is better to send sample of the hose, as different makes of hose vary a great deal. We must also have sample thread by which to cut thread on the couplings, as we guarantee the threads to fit only when sample thread is given us with the order.

HOSE SPANNERS.—J-54 and J-63.

SIZE . . . . . INCHES	1¼	1½	2	2½
J-54 . . . . . EACH	----	----	.45	.45
J-63 . . . . . EACH	.12	.15	.20	.25

AUTOMATIC HOSE EXPANDERS. (Not Illustrated.)

SIZE . . . . . INCHES	1½	2	2½	3	3½	4	4½
EXPANDER COMPLETE . . . . . EACH	12.00	12.00	12.00	15.00	25.00	25.00	25.00
EXPANSION RINGS . . . . . PER DOZEN	3.00	3.00	3.00	6.00	6.00	6.00	6.00



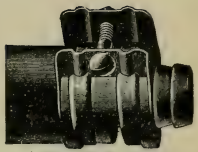
J-70. HOSE STRAP.



J-72. STRAP FASTENER.



J-74. SHERMAN CLAMP.



J-76. SHERMAN MENDER CLAMP.

HOSE STRAPS AND FASTENERS.—J-70 and J-72.

NUMBER	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
SIZE INCHES	½	½	¾	¾	1	1	1¼	1¼	1½	1½	1¾	1¾	2	2	2¼	2¼	2½	2½
LENGTH INCHES	3⅜	3¾	4¼	4¾	5	5⅜	6	6⅜	6¾	7⅛	7½	8	8½	9	9½	10	10½	11
PER DOZEN	.40	.40	.60	.60	.80	.80	1.00	1.00	1.20	1.20	1.40	1.40	1.60	1.60	1.80	1.80	2.00	2.00

H-356.—Hose Strap Fastener, ½ to 1-inch, each 50 cents; 1¼ to 2½-inch, each 75 cents.

SHERMAN HOSE CLAMPS.—J-74.

SIZE INCHES	½	½	½	¾	¾	¾	1	1	1¼	1¼	1½	1½	2	2	2½	2½
HOSE-PLY	2	3	4	2	3	4	3	4	3	4	3	4	3	4	3	4
PER DOZEN	.60	.60	.60	.60	.60	.60	2.00	2.00	2.50	2.50	3.00	3.00	4.00	4.00	7.00	7.00

SHERMAN CLAMPS FOR STEAM HOSE, HEAVY.—J-74.

SIZE INCHES	¾	¾	1	1	1¼	1¼	1½	1½	1½	2	2
HOSE-PLY	3	4	3	4	3	4	3	4	5	3	4
PER DOZEN	2.00	2.00	2.50	2.50	3.00	3.00	3.50	3.50	3.50	5.50	5.50

J-76.—Sherman Double or Mender Clamps, ½ or ¾-inch, per dozen, $2.40.



U.S. PATENTS. Nos. 477,237, 480,513, 480,514, 480,515, 515,522, and Canadian Patent No 44,081.

J-79. STEEL HOSE CLAMP, RUST PROOF.

STEEL MILL OR COTTON HOSE CLAMPS.—J-79.

SIZE INCHES	1½	1½	2
PER DOZEN	2.00	2.50	3.50

STEEL AIR BRAKE HOSE CLAMPS.—J-79.

SIZE INCHES	1	1¼
PER DOZEN	2.50	3.00

STEEL STEAM HOSE CLAMPS.—J-79.

SIZE INCHES	½	¾	1	1¼	1½	2	2½
PER DOZEN	1.00	1.50	2.50	3.00	3.50	5.50	7.00

VISE JAWS.—J-82.



J-82.

For applying Clamps to Hose. Can be attached to any bench vise.

No. 1. For sizes to 1½ - - each, .40
No, 2. For sizes 1½ to 3 - - each, .50



SHOWING VISE JAWS J-82 AS OPERATED IN BENCH VISE.



J-90.
HOSE BUSHING.



J-92.
REDUCER.



J-94.
MALE NIPPLE.



J-96.
FEMALE NIPPLE.



J-99.
HOSE BIBB END.

HOSE BUSHINGS AND REDUCERS—J-90 and J-92.

SIZE . . . . . INCHES	1 x ¾	1¼ x 1	1¼ x ¾	1¼ x 1¼	1½ x 1	1½ x ¾	2 x 1½	2 x 1¼
PER DOZEN	6.50	10.00	10.00	12.00	12.00	12.00	18.00	18.00

Hose Bushings and Reducers have hose thread on both Male and Female ends.

HOSE NIPPLES AND HOSE BIBB ENDS.—J-94, J-96 and J-99.

SIZE . . . . . INCHES	½	⅝	¾	1	1¼	1½	2	2½	3
J-94 AND J-96 . . . . . PER DOZEN	3.50	....	3.50	5.00	9.00	10.00	14.00	28.00	40.00
J-99 . . . . . PER DOZEN	2.50	2.50	2.50	3.50	6.00	8.00	15.00	24.00	.....

Male Hose Nipples have hose thread on one end and iron-pipe thread on other end; except 3-inch, both ends for iron-pipe. Female Hose Nipples have hose thread on Male end; iron-pipe thread on Female end.



J-105. HOSE MENDER.



J-108. HOSE SPRINKLER.

IRON HOSE MENDERS.—J-105.

SIZE . . . . . INCHES	¾	1
PER DOZEN	1.00	1.50

HOSE SPRINKLERS.—J-108.

DIAMETER . . . . . INCHES	1½	1¾	2	2¼	2½	3
SIZE THREAD . . . . . INCHES	⅝	⅝	¾	¾	1	1¼
PER DOZEN	3.25	3.50	4.50	5.25	6.00	9.00



J-114. NOZZLE, FOR LEAD PIPE.



J-116. NOZZLE, FOR IRON PIPE.



J-118. FOUNTAIN HEAD.

HYDRANT NOZZLES AND FOUNTAIN HEADS.

SIZE . . . . . INCHES	½	¾	1
J-114. BRASS . . . . . PER DOZEN	7.00	8.50	10.00
J-116. BRASS . . . . . PER DOZEN	8.00	9.50	11.00
J-118. TO SCREW ON ½-INCH IRON PIPE . . . . . EACH	1.50	....	.....
J-118. TO SCREW ON ¾-INCH IRON PIPE . . . . . EACH	....	2.00	.....

HOSE GOODS.



J-125. FOUNTAIN SPRINKLER.

FOUNTAIN LAWN SPRINKLERS.—J-125.

FINISHED BRASS	EACH	2.50
NICKEL PLATED	EACH	3.50



J-130. FOUR-ARM.



J-131. EIGHT-ARM.



J-132. EIGHT-ARM, WITH BALL AND BASKET.

STANDARD LAWN SPRINKLERS.

FOUR-ARM	EACH	6.50
EIGHT-ARM	EACH	7.50
FOUR-ARM, WITH BALL AND BASKET	EACH	13.00
EIGHT-ARM, WITH BALL AND BASKET	EACH	14.00

PARTS FOR STANDARD LAWN SPRINKLERS.

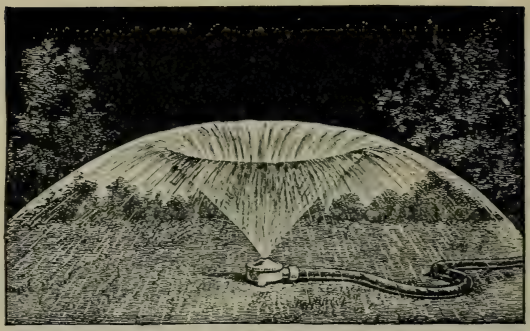
TOPS ONLY, FOR FOUR OR EIGHT ARM SPRINKLER	EACH	2.00
STAND ONLY, FOR FOUR OR EIGHT ARM SPRINKLER	EACH	1.00
LONG ARM	EACH	.35
SHORT ARM	EACH	.25
BASKET	EACH	.75
BALL	EACH	.75



J-140.
TO LIE ON GROUND.



J-141.
FOUNTAIN OR
IRRIGATING HEAD



J-140. CACTUS SPRINKLER.



J-142.
ON SLED.

FIGURE	J-140	J-141	J-142
FOR ½-INCH IRON PIPE CONNECTION	----	----	1.50
FOR ¾-INCH HOSE CONNECTION	1.50	2.00	2.00
FOR 1-INCH HOSE CONNECTION	2.00	2.50	----
LARGE PATTERN, FOR PARK USE, 1-INCH CONNECTION	----	3.00	2.50



J-147.

***J-147.**

¾-inch Hose Connection, each, $3.25
1-inch Hose Connection, each, 3.85

For high pressure, 30 to 100 pounds.

*In ordering, state water pressure and size of Hose Connection.



J-148.

***J-148.**

¾-inch Hose Connection, each, $2.75
1-inch Hose Connection, each, 3.50

For medium pressure, 25 to 35 pounds.

***J-149.**

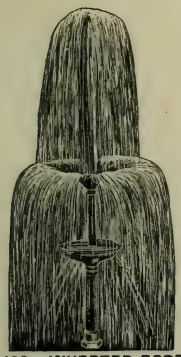
¾-inch Hose Connection, each, $3.50
1-inch Hose Connection, each, 4.25

For low pressure, 10 to 25 pounds.

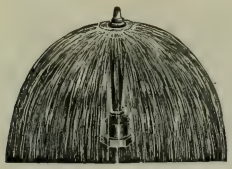


J-149.

The Ryan Park Sprinkler throws an even, light spray, which does not saturate one spot but is caught by the breeze and constantly carried to different parts of the lawn or green. It is a beautiful sight, cannot blow down, will not injure turf, and does not require a man to be in constant attendance.



J-160. INVERTED ROSE.



J-161. UMBRELLA.



J-162. FOUR-ARM REVOLVING AND ROSE.



J-163. UMBRELLA AND FOUR-ARM REVOLVING.



J-164. FOUR-ROSE, FOUR-ARM REVOLVING AND ROSE.



J-165. COMBINATION ROSE.



J-166. EIGHT PRONGS.

We do not guarantee Jets to operate precisely as shown, on account of varied pressures under which they may be used, and cannot accept their return on this account.



J-167. DOUBLE REVOLVING AND ROSE.

FOUNTAIN JETS.

FIGURE		J-160	J-161	J-162	J-163	J-164	J-165	J-166	J-167
⅛-INCH	EACH	----	8.25	10.50	----	----	----	----	----
¼-INCH	EACH	----	9.50	12.50	----	----	10.00	5.50	17.00
½-INCH	EACH	18.00	10.75	14.00	22.50	22.50	11.00	6.75	21.00



J-180. WIZARD SPRINKLER.

WIZARD LAWN SPRINKLER.—J-180.

ALL IRON, CAST IN ONE PIECE, NO WEARING PARTS	EACH	.50



J-183.
CLAMP FOR ROD.



J-184.
CLAMP FOR IRON PIPE.



J-186.
PATENT CLAMP.



J-188.
SOCKET.

MALLEABLE HYDRANT CLAMPS AND SOCKETS.

J-183.	PER POUND	.15
J-184. TAPPED FOR ⅜-INCH IRON PIPE	PER POUND	.18
J-184. TAPPED FOR ½-INCH IRON PIPE	PER POUND	.20
J-186. TAPPED FOR ⅜ OR ½-INCH IRON PIPE	PER DOZEN	1.25
J-188.	PER POUND	15



J-190.



J-192. HYDRANT KEY.



J-194. ROD REST.



J-196. ROD HANDLE.

J-190.	MALLEABLE IRON	PER POUND	.15
J-190.	SMALL PATTERN, FOR IRON STREET WASHER	EACH, NET	.15
J-192.	BRASS	PER DOZEN	5.00
J-192.	MALLEABLE IRON	PER POUND	.15
J-194.	CAST IRON	PER DOZEN	.96
J-196.	MALLEABLE IRON	PER DOZEN	2.00
J-196.	BRASS FINISHED	EACH	.50



J-207.

COTTON MILL HOSE, RUBBER-LINED.

GUARANTEED 300 POUNDS PRESSURE.

SIZE . . . . . INCHES	1¼	1½	2	2½
PRICE, WITHOUT COUPLINGS . . . . . PER FOOT	.45	.50	.60	.70

No doubt is now expressed of the superiority of Cotton Rubber-Lined Hose over all other kinds for factory and mill fire protection, and a trial of our Mill Hose will convince purchasers that we are able to make the best Seamless Woven, Cotton, Rubber-Lined Mill Hose in the market. This hose is light, strong and pliable, reels closely, and will not sweat or leak like linen hose. We put such a high grade of rubber in these goods that they will last for years, even if laid aside and not used.

FIRE HOSE.—STANDARD SIZE 2½-INCH.

COTTON, DOUBLE JACKET RUBBER-LINED, GUARANTEED PRESSURE 400 POUNDS, FOR 3 YEARS . . . PER FOOT	1.00
COTTON, SINGLE JACKET RUBBER-LINED, GUARANTEED PRESSURE 350 POUNDS, FOR 3 YEARS. . . . PER FOOT	.75
RUBBER, FOUR-PLY, FIVE-PLY CAPPED ENDS, GUARANTEED PRESSURE 400 POUNDS, FOR 3 YEARS. . PER FOOT	1.00

UNDERWRITERS' LINEN HOSE (GUARANTEED).

SIZE. . . . . INCHES	1	1¼	1½	2	2½	3
PRICE . . . . . PER FOOT	.27	.30	.33	.42	.50	.65

STANDARD LINEN HOSE.

SIZE . . . . . INCHES	1	1¼	1½	2	2½	2½	3
UNLINED (NOT GUARANTEED) . . . . . PER FOOT	.16	.18	.20	.25	.27	.29	.45

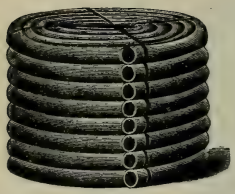


COWEN COTTON JACKET STEAM HOSE.—J-210.

RUBBER-LINED.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
PER FOOT	.63	.83	1.03	1.30	1.56	2.07	2.60

We guarantee each length to stand a continuous pressure of 100 lbs. six weeks; 50 lbs. three months; 25 lbs. six months.
It takes the place of a 7-ply marlin wound, extra heavy steam hose, and costs 20 per cent less.
It depends for its strength to resist a bursting pressure upon cotton jackets, which are woven with heavy filling threads, running spirally the whole length of the hose. Thus it gets as great strength as marlin wound rubber hose at less cost.



J-218. RUBBER WATER HOSE.



J-221. RUBBER GARDEN HOSE.

RUBBER WATER HOSE.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	2½	3	4
2-PLY . . . . . PER FOOT	.20	.25	.33	.42	.50	.66	.75	.83	.99	1.32
3-PLY . . . . . PER FOOT	.25	.30	.40	.50	.60	.80	.90	1.00	1.20	1.60
4-PLY . . . . . PER FOOT	.30	.37	.50	.62	.75	1.00	1.12	1.25	1.50	2.00

Five and Six-Ply Hose made to order at an advance of 25 and 50 per cent. on Four-Ply prices.

We make the following brands of Rubber Water Hose:

Double Extra . . . . . guaranteed 100 pounds pressure.
Extra . . . . . guaranteed 75 pounds pressure.
Extra Standard . . . . . guaranteed 50 pounds pressure.
Standard . . . . . guaranteed 35 pounds pressure.

Should any Hose be returned claimed defective, we will test it on pumps erected for this purpose, and if it will not stand pressure as guaranteed, will credit; if, however, it stands the pressure named, no credit will be given.

RUBBER GARDEN HOSE.—J-221.

GUARANTEED FOR ONE SEASON, FOR PRESSURES AS INDICATED.

SIZE . . . . . INCHES	¾
STANDARD, 3-PLY, LIGHT DUCK . . . . . FOR PRESSURE, POUNDS	50
EXTRA STANDARD, 3-PLY, HEAVY DUCK . . . . . FOR PRESSURE, POUNDS	75
EXTRA, 4-PLY, HEAVY DUCK . . . . . FOR PRESSURE, POUNDS	100
DOUBLE EXTRA, 7-PLY SHEETING . . . . . FOR PRESSURE, POUNDS	150
TRIPLE EXTRA, 5-PLY DUCK, EXTRA QUALITY TUBE . . . . . FOR PRESSURE, POUNDS	150

All Garden Hose furnished in 50-foot lengths, with Couplings attached. Prices upon application.

COTTON GARDEN HOSE.

SEAMLESS WOVEN COTTON, RUBBER-LINED—GUARANTEED.

SIZE . . . . . INCHES	½ Coupled.	¾ Coupled.	1 Uncoupled.
PER FOOT	.25	.30	.45

Cotton Woven Rubber-lined Hose we carry in three grades: Standard, Extra Standard, and Extra—all of which we guarantee.

*AIR HOSE.

INSIDE DIAMETER . . . . . INCHES	½	¾	1	1¼	1½	1¾	2	2½	2½	3
3-PLY . . . . . PER FOOT	.43	.51	.67	.85	1.03	1.18	1.34	1.50	1.66	2 00
4-PLY . . . . . PER FOOT	.51	.67	.83	1.04	1.25	1.45	1.66	1.87	2.08	2.80
5-PLY . . . . . PER FOOT	.63	.83	1.03	1.30	1.56	1.81	2.07	2.33	2.60	3.50
6-PLY . . . . . PER FOOT	.76	1.00	1.24	1.56	1.87	2.17	2.49	2.80	3.12	4.20

We can furnish Air Hose for Pneumatic Tools especially adapted to the peculiar service required.

*Air Hose is usually wire wound as a protection and for additional strength. Wire winding extra.

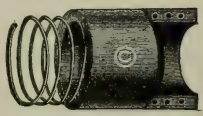
STEAM AND BREWERS' HOSE.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½
3-PLY . . . . . PER FOOT	.43	.51	.67	.85	1.02	1.34	1.66
4-PLY . . . . . PER FOOT	.51	.67	.83	1.04	1.25	1.66	2.08
5-PLY . . . . . PER FOOT	.63	.83	1.03	1.30	1.56	2.07	2.60
6-PLY . . . . . PER FOOT	.76	1.00	1.24	1.56	1.87	2.49	3.12

Steam Hose wound with round steel wire, flat steel band or marlin wound.
We make Steam and Brewers' Hose in three grades—Double Extra, Extra, and Standard.



J-228. RUBBER SUCTION HOSE, ON FLAT GALVANIZED IRON WIRE.



J-230. RUBBER SUCTION HOSE. SMOOTH BORE.

RUBBER SUCTION HOSE.

SIZE . . . . INCHES	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10	12
J-228. PER FOOT . .	1.65	2.50	3.10	4.00	4.90	5.80	6.70	7.60	9.50	12.00	15.00	17.50	20.00	25.00
J-230. PER FOOT . .	....	2.60	3.50	4.50	5.50	6.50	7.50	8.50	10.50	13.50	16.50	19.50	22.50	27.50

J-230.—Smooth Bore Suction Hose. This hose has a rubber lining, so that the wire is protected against the action of the water, and it gives the hose a perfect water-way, so that greater effectiveness can be obtained. It is especially desirable for fire engines, as they can get a better suction. It is also desirable for marine work, because the rubber prevents the wire from rusting. It is very flexible and strong, and is made of the very best materials throughout.

AGRICULTURAL SMOOTH BORE SUCTION HOSE.

SIZE . . . . . INCHES	1¼	1½	1¾	2	2¼	2½
PER FOOT	.93	1.13	1.31	1.50	1.69	1.88

This is a suction hose made especially for agricultural purposes. It is very light and strong, and at the same time very reasonable in price. It is made in 10, 15, 25 and 50 foot lengths, and in sizes from 1-inch to 2-inch inclusive.

FOUR-PLY HARD RUBBER SUCTION HOSE.

SIZE . . . . . INCHES	¾	1
PER FOOT	.65	.75

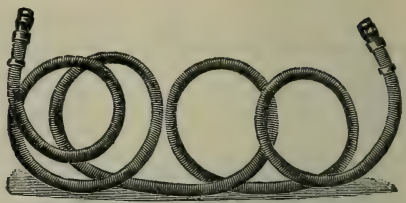
This Suction Hose is less expensive than that made on wire, and will answer for many purposes.

RAILROAD TANK HOSE.

INSIDE DIAMETER . . . . . INCHES	3	4	5	6	7	8	9	10
TWO-PLY . . . . . PER FOOT	.99	1.32	1.65	1.98	2.31	2.64	2.97	3.33



J-238. RUBBER TUBING.



J-240. FLEXIBLE METAL HOSE.

RUBBER TUBING.—J-238.

SIZE, INSIDE DIAMETER . . . . . INCHES	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
PLAIN OR CORRUGATED . . . . . PER FOOT	.08	.12	.16	.18	.20	.25	.30	.35	.45
CLOTH INSERTION, 3-PLY . . . . . PER FOOT	.10	.14	.18	.20	.23	.28	.33	.38	.50
EXTRA HEAVY BEER TUBING, 5 OR 6-PLY . . . . . PER FOOT	---	---	---	---	.28	.33	---	---	---
SODA TUBING, 6-PLY . . . . . PER FOOT	---	---	---	---	.30	.35	---	---	---

FLEXIBLE METAL HOSE, FOR HIGH STEAM PRESSURES.—J-240.

SYSTEM 2B	DOUBLE HOSE OUTSIDE STEEL, INSIDE COPPER							SINGLE HOSE SINGLE COPPER TUBE						
SIZE . . . . . INCHES	3/8	1/2	3/4	1	1 1/4	1 1/2	2	3/8	1/2	3/4	1	1 1/4	1 1/2	2
PRICE . . . . . PER FOOT	1.28	1.49	2.22	2.84	3.20	4.17	5.24	.60	.76	1.40	1.80	2.25	2.93	3.72
CONNECTIONS . . . . . PER SET	1.40	1.80	2.37	2.85		PRI	CES	ON	AP	PLI	CAT	ION		
WORKING PRESSURE . . . . POUNDS	400	400	400	400	400	400	350	200	200	200	200	200	200	200
ROLLS TO CIRCLE, DIAMETER INCHES	12	14	16	20	22	24	28	9	10	13	16	18	24	28

FLEXIBLE METAL HOSE, FOR AIR, PETROLEUM, GASOLINE, OILS, LYES, ETC.

*SYSTEM 2A	DOUBLE HOSE OUTSIDE STEEL, INSIDE STEEL							SINGLE HOSE SINGLE STEEL TUBE						
SIZE . . . . . INCHES	3/8	1/2	3/4	1	1 1/4	1 1/2	2	3/8	1/2	3/4	1	1 1/4	1 1/2	2
PRICE . . . . . PER FOOT	.66	.84	1.32	1.54	1.75	2.22	2.79	.28	.33	.71	.84	1.03	1.39	1.76
CONNECTIONS . . . . . PER SET	PRI	CES	ON	AP	PLI	CAT	ION	PRI	CES	ON	AP	PLI	CAT	ION
WORKING PRESSURE . . . . POUNDS	280	280	280	280	280	280	280	210	210	210	210	210	210	200

Prices on application for 2½, 3, 3½, 4, 5, and 6-inch sizes; also for Pneumatic Hose and Double Gas Hose. Write for circular showing construction, application, etc.

*Not quite as flexible as System 2B.

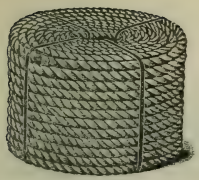


J-242. HYDRAULIC PACKINGS.

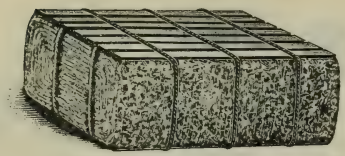
HYDRAULIC LEATHER PACKINGS.—J-242.

OUTSIDE DIAMETER . . INCHES	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4
PRICE . . . . . EACH	.40	.43	.45	.50	.60	.70	.80	.90
OUTSIDE DIAMETER . . INCHES	3	3 1/4	3 1/2	3 3/4	4	4 1/2	5	---
PRICE . . . . . EACH	1.00	1.15	1.30	1.50	1.85	3.00	4.00	---

We furnish these Packings without holes in the bottom, or with hole of any size specified, without extra charge.



J-254. HEMP AND JUTE PACKING.



J-256. OAKUM.



J-258. COTTON WASTE.

HEMP, JUTE, AND OAKUM PACKINGS.—J-254 and J-256.

ITALIAN HEMP, A	PER POUND	.20
AMERICAN EXTRA REFINED HEMP	PER POUND	.15
JUTE	PER POUND	.08
TARRED JUTE	PER POUND	.10
OAKUM	BALE (50 POUNDS)	5.00

Our Oakum and Jute Packings are carefully selected, and will be found particularly adapted for use in calking Cast-Iron Pipe. We use only Spun Navy Oakum.

WHITE COTTON WASTE.—J-258.

BRAND	DYNAMO	SUPERB	CRESCENT
PRICE PER POUND	.15	.12	.10

We make a specialty of Cotton Waste for use by Water Works and Electric Light Plants, and recommend the use of our Dynamo Brand for Generators and all Machines. The Superb Brand is also a high-grade Waste, but less absorbent than the Dynamo. For general use about Engine Rooms the Crescent Brand is a most excellent Waste.

For convenience of our trade we carry 500, 100 and 50-pound bales. For less than full bales 1 cent per pound will be added to price.

COLORED COTTON WASTE.—J-258.

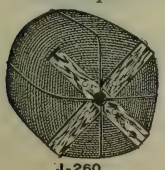
NUMBER	1	2	3
PRICE PER POUND	.10	.09	.08

MANILLA ROPE.

SIZE IN DIAMETER INCHES	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{13}{16}$	$\frac{7}{8}$	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{1}{4}$
WEIGHT OF 100 FEET LBS.	3	4	$5\frac{1}{2}$	7	8	11	15	17	21	25	33	36	42	46
STRENGTH OF NEW ROPE, LBS.	450	750	900	1250	1700	2300	3000	4000	5000	5800	7000	8000	9200	11000
SIZE IN DIAMETER INCHES	$1\frac{3}{8}$	$1\frac{7}{16}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{7}{8}$	3	$3\frac{1}{2}$	----
WEIGHT OF 100 FEET LBS.	54	62	67	84	100	120	142	170	192	217	243	276	350	----
STRENGTH OF NEW ROPE, LBS.	13500	15500	17000	19900	23500	29300	37000	42000	48000	54000	61000	67000	96000	----

Per pound, all sizes, 20 cents. A very large stock of all sizes always on hand. Hawser Laid Manilla Rope for oil and artesian well use.

Tallow Laid Manilla Rope laid up in three and four strands. We guarantee all our Manilla Rope to be made out of pure Manilla Hemp of the best quality.



J-260.

JUTE TUBE ROPE OR CORD.—J-260.

4 AND 5-PLY	PER POUND	Special
6 TO 14-PLY	PER POUND	Special

Put up on 50-pound Reels and in 25-pound Balls, packed in 300-pound Bales.


J-270.


J-273.


J-277.


J-279.

RUBBER BUMPERS.

J-270. PIPE STRAP BUMPERS	PER DOZEN	.50
J-273. SEAT BUMPERS	PER DOZEN	.50
J-277. SEAT BUMPERS	PER DOZEN	.50
J-279. TACK BUMPERS	PER DOZEN	.50



J-282. BALL COCK WASHERS.



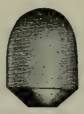
J-286. SLIP JOINT WASHERS.

WASHERS.—J-282 and J-286.

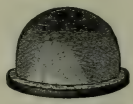
*J-282. BALL COCK WASHERS, ANY STANDARD SIZE	PER DOZEN	.75
*J-286. SLIP JOINT WASHERS, SQUARE OR ROUND, ANY STANDARD SIZE	PER DOZEN	.50

*In ordering, give diameters and thickness.


J-290. BIBB WASHERS.


J-292. FULLER BALL.


J-294. PRIER BALL.


J-296. PRIER CUSHION.

BIBB WASHERS AND FULLER BALLS.—J-290 and J-292.

SIZE — INCHES	⅜	½	⅝	¾	1	1¼
J-290. BOSS BIBB WASHERS, FOR COMPRESSION BIBBS — PER 100	.75	.75	.75	.75	----	----
J-290. TOP COMPRESSION BIBB WASHERS, CLOTH INSERTION — PER 100	.75	.75	.75	.75	----	----
J-290. FIBER WASHERS, FOR COMPRESSION BIBBS — PER 100	.75	.75	.75	.75	.75	----
*J-292. FULLER BALLS — PER DOZEN	----	.75	.75	1.00	1.25	2.00

*In ordering Fuller Balls always specify whether wanted for Hot or Cold Water Faucet.

PRIER BALLS AND CUSHIONS.—J-294 and J-296.

J-294. PRIER BALLS	PER DOZEN	.75
J-296. PRIER CUSHIONS	PER DOZEN	1.00



J-301.



J-303.



J-307.



J-311.



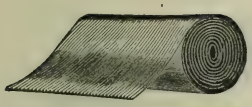
J-314.

BASIN AND BATH WASHERS.

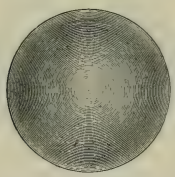
SIZE — INCHES	1	1¼	1½
J-301. GRAY — PER DOZEN	1.00	1.25	1.50
J-303. WHITE — PER DOZEN	1.00	1.50	1.75
J-307. WHITE — PER DOZEN	1.75	2.25	2.50

BASIN AND BATH GASKETS.

SIZE — INCHES	1	1½
J-311 — PER DOZEN	1.00	----
J-314 — PER DOZEN	----	2.00



J-321. CORRUGATED MATTING.



J-324. SOLID BALL VALVES.



J-328. STEAM TRAP GASKET.

CORRUGATED MATTING.—J-321.

Made in all widths up to and including 36 inches, in $\frac{3}{32}$, $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{3}{8}$, $\frac{5}{16}$ and $\frac{1}{2}$ inch thick. Cut in lengths as desired. Prices, special.

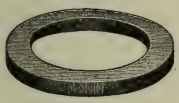
*SOLID BALL VALVES.—J-324.

SIZE . . . . . INCHES	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$
SIZE . . . . . INCHES	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	$4\frac{1}{2}$	5	6

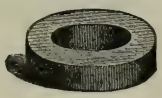
*Prices special.

STEAM TRAP GASKETS.—J-328.

SIZE TRAP . . . . . INCHES	10	12	15	18
INSIDE DIAMETER . . . . . INCHES	$8\frac{1}{2}$	11	$14\frac{1}{2}$	$16\frac{3}{4}$
OUTSIDE DIAMETER . . . . . INCHES	$9\frac{1}{2}$	$12\frac{1}{4}$	$15\frac{1}{2}$	18
$\frac{1}{8}$ INCH THICK, WITH CLOTH INSERTION . . . . . EACH	.75	.85	1.00	1.25



J-331. HOSE WASHER.



J-334. SQUARE.



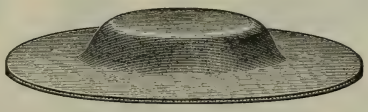
J-336. ROUND.

RUBBER HOSE WASHERS.—J-331.

SIZE . . . . . INCHES	$\frac{3}{4}$
PRICE . . . . . PER 100	.75

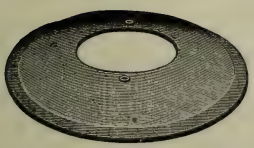
GAUGE GLASS WASHERS.—J-334 and J-336.

SIZE GLASS . . . . . INCHES	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
J-334 OR J-336 . . . . PER POUND	1.40	1.40	1.40



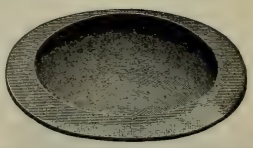
J-342.—HIGH PRESSURE DIAPHRAGMS.

Size . . . . . Inches 9
Prices . . . . . Special



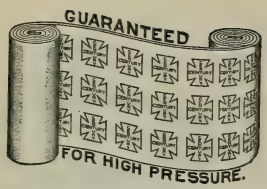
J-346. PUMP DIAPHRAGMS.

For Nos. 1 and 2 Trench Pumps.
Prices . . Special.

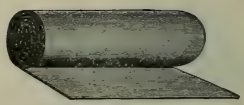


J-348. LOW PRESSURE DIAPHRAGMS.

Sizes . . . Inches 8, 9 and 10.
Prices . . Special.



J-354. CENTURY SHEET PACKING.
SEND FOR SAMPLE.

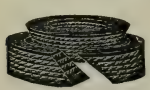


J-358. RUBBER SHEET PACKING.

J-354. Century Packing, guaranteed, is a scientific combination of asbestos and the best quality Para rubber, without any adulteration or coloring matter. It is an excellent Flange Packing for high or low pressures, steam, water, ammonia, acid, etc. It retains its strength and pliability in any degree of heat, when in service, without melting or blowing out under high pressure. Century Packing does not bake hard to the flange, therefore does not need facing with plumbago or similar materials. Joints made with it can be readily broken and can be re-used repeatedly. It can be carried in stock without deteriorating or losing strength. Thickness, $\frac{1}{32}$, $\frac{1}{16}$, $\frac{3}{32}$, $\frac{1}{8}$ and $\frac{3}{16}$ inches. - - - - - - Per pound, $1.00

J-358. Rubber Sheet Packing, Plain or Cloth Insertion, Cloth one or both sides; Thickness, $\frac{1}{32}$, $\frac{1}{16}$, $\frac{3}{32}$, $\frac{1}{8}$ and $\frac{3}{16}$ inches. 1, 2, 3, or 4 ply, per pound, Special.

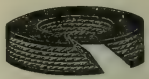
Pure Sheet Packing or Valve Gum, per pound, $1.40. Kept on hand, in sheets $\frac{1}{32}$, $\frac{1}{16}$, $\frac{3}{32}$, $\frac{1}{8}$, $\frac{3}{16}$, and $\frac{1}{4}$ inches thick. We carry in stock three grades, XX, XXX, and XXXX, the last being the best quality. There is one ply of cloth to every $\frac{1}{16}$-inch thickness. Each cloth, whether insertion or on outside, to count as one ply.



J-362. GARLOCK SECTIONAL RING PACKING.



J-366. GARLOCK SPIRAL PACKING.



J-369. GARLOCK ELASTIC RING PACKING.

GARLOCK PACKINGS.—J-362, J-366 AND J-369 - PER POUND	1.20



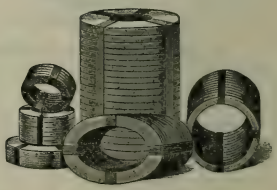
J-372. ROUND PISTON PACKING.



J-376. SQUARE PISTON PACKING.



J-379. SQUARE PISTON PACKING, RUBBER BACK.



J-381. GASKETS.

PISTON PACKINGS.

J-372 AND J-376 - - - - - - PER POUND	.85
J-379 - - - - - - - - - - - - PER POUND	1.00

GASKETS.—J-381.

PURE RUBBER - - - - - - - - PER POUND	1.50
CLOTH INSERTION - - - - - - PER POUND	1.25



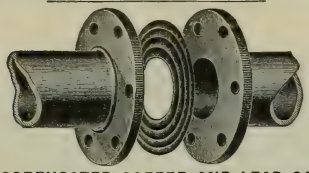
J-385. PURE RUBBER VALVES.

PURE RUBBER VALVES.—J-385.

DIAMETER - - - - - - - - INCHES	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6
THICKNESS - - - - - - - - INCHES	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$
SIZE OF HOLE - - - - - - - INCHES	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$

We have in stock four grades: Hard, for hot water; Medium and Soft, for cold water; Special Hard Valves for ammonia. Special Valves made to order.
Price per pound, - - - - - - - $1.50

FOR UNIONS,
FLANGE UNIONS,
FLANGE JOINTS.



FOR STEAM,
GAS, WATER,
AIR, PIPE.

J-390. CORRUGATED COPPER AND LEAD GASKETS.

FOR UNIONS.

SIZE UNION . . . . . INCHES	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
INSIDE DIAM. GASKET . . . . . INCHES	7/16	5/8	3/4	1	1 1/4	1 1/2	1 3/4	2 1/4	2 3/4	3 1/4	3 3/4	4 3/8
OUTSIDE DIAM. GASKET . . . . . INCHES	1/2	1 1/16	1 1/2	1 1/2	1 3/4	2 1/8	2 1/2	3	3 1/2	4 1/4	4 3/4	5 1/2
PRICE . . . . . EACH	.02	.02	.02	.02	.03	.04	.05	.06	.06	.11	.13	.18

FOR FLANGE UNIONS.

SIZE FLANGE UNION . . . . . INCHES	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8	9	10	12
INSIDE DIAM. GASKET . . . . . INCHES	1 3/4	2 3/8	2 3/4	3 3/8	3 7/8	4 3/8	4 7/8	5 1/2	6 3/8	7 3/4	8 7/8	10	11	12 3/4
OUTSIDE DIAM. GASKET . . . . INCHES	2 3/8	3 1/4	3 5/8	4 3/8	5 1/4	5 3/4	6 3/8	6 3/4	8 1/8	9 3/8	10 1/2	12 3/8	12 7/8	14 3/4
PRICE . . . . . EACH	.06	.08	.09	.12	.19	.18	.27	.27	.39	.44	.49	.84	.70	.87

FOR FLANGED FITTINGS.

SIZE FITTING . . . . . INCHES	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8	9	10	12	14
INSIDE DIAM. GASKET . . . . . INCHES	2 3/4	3 1/4	3 3/4	4 1/2	5	5 1/2	6	7	7 3/4	8 3/4	10 1/4	10 3/4	13	14 1/2
OUTSIDE DIAM. GASKET . . . . INCHES	4 1/4	4 3/4	5 1/4	6	6 3/8	7	7 3/8	8 3/8	10 1/8	11 1/2	13	13 1/4	16	17 1/2
PRICE . . . . . EACH	.16	.23	.24	.25	.26	.29	.30	.33	.67	.88	.92	.94	1.37	1.51

CORRUGATED METAL GASKETS.

SIZE PIPE . . . . . INCHES	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8	10
FOR FLANGE UNIONS . EACH	---	---	---	---	---	.15	.18	.20	.25	.35	.40	.45	.50	.60	.80	1.00
FOR UNIONS . . . . . EACH	.20	.25	.30	.35	.40	.45	.50	---	---	---	---	---	---	---	---	----

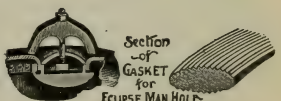
Measures are inside of Bolts. In ordering give size of pipe.



J-395.



J-397.



J-399.

THREE-RIDGE METAL MAN-HOLE GASKETS.—J-395 and J-397.

SIZE . . . . . INCHES	10x14	10x15	10x16	10x18	11x15	12x16
EACH	1.50	1.50	1.50	1.50	1.50	1.50

GASKETS FOR ECLIPSE MAN-HOLES.—J-399.

SIZE . . . . . INCHES	10x14	10x15	10x16	10x18
EACH	1.00	1.00	1.00	1.00

Gaskets made to order in all sizes. In ordering, give inside dimensions and shape.

METAL HAND-HOLE GASKETS.

SIZE . . . . . INCHES	2 1/2x3 1/2	2x4	3 1/2x4 1/2	4x5	4 1/2x5 1/2	4x6	5x7
EACH	.10	.15	.20	.25	.30	.35	.40

BABCOCK and WILCOX, 6x8, each, .50; CAMPBELL and ZELL, 4x11, each, .12; HEINE HAND-HOLE, each, .10; HEINE PLUGS, each, .05; EDGEMOOR'S OVAL, each, .05; STANDARD, 4x11, each, .12.



J-407. MAGNOLIA BABBITT METAL.

Magnolia Anti-friction Babbitt Metal is used all over the world by Railroads, Steamships, Machinists and Manufacturers. It will not cut Journals, saves oil, fuel, power and rebabbitting.

Price, - - - - - - - - - per pound, .30



J-409. DEFENDER METAL.

Defender Anti-friction Metal is a thoroughly high-grade Babbitt Metal, possessing many of the excellent qualities which characterize the Magnolia.

Price - - - - - per pound, .21

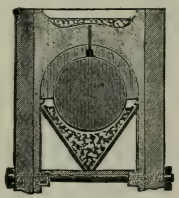


J-411. MYSTIC METAL.

This is one of the best medium-grade Metals on the market. It is made of carefully selected and refined materials, and will show less dross and give better service than many Babbitt Metals sold at double the price.

Price - - - - - per pound, .18

NO HOT JOURNALS.



GREAT SAVING IN OIL.

J-415. ROGERS IMPROVED JOURNAL PACKING AND ROGERS RECEPTACLES.

THE ROGERS IMPROVED JOURNAL PACKING is in use on leading Railroads, Elevated Roads, Electric and Cable Lines. The value of it as a lubricator for car and engine journals lies in the combination of the best Cotton Waste and Steel Wool. Cotton Waste has 50 per cent greater absorbency and capillarity for oil than wool waste or any other known device for the purpose required. The combination of steel wool keeps the packing lightly in contact with the journal, thus obtaining constant and continuous lubrication, as the conditions of the service may require. The effect of heating of the journal is to warm up the steel wool, causing the oil in contact therewith to thin and be immediately delivered to the journal by means of the cotton waste, reducing friction, thus cooling the journal.

Price - - - - - - - - - - per pound, .30

ROGERS RECEPTACLES.—The Packing is contained in a specially designed Receptacle stamped and formed from Sheet Steel, a permanent fixture to car, fitting into oil box. It saves 30 per cent of space required for packing. Packing is held firmly and cannot roll or get under journal bearing. All dust, dirt, etc., sift through to bottom of box, keeping waste as clean as possible. V-shaped form and pliability allow oilers to inspect oil in box instantly.

Price - - - - - - - - - - - each, .15

MISCELLANEOUS PACKING.

CANDLE WICKING.
CARDINAL RED SHEET PACKING.
CENTURY SHEET PACKING, see page 294.
CRANDALL PACKING.
DANIELS P P P PACKING.
ECLIPSE PACKING.
EMPIRE GUM CORE PACKING, Square, Round or Oval, on Reels.
EUREKA GUM CORE PACKING, Square, Round or Oval, on Reels.
GOODSELL'S DOLLAR PACKING.
GOODSELL'S RUBBER BACK FLAX PACKING.
JENKINS SHEET PACKING.
MABB'S RAWHIDE PACKING.
METAL BESTOS PACKING.
PEERLESS PACKING, Spiral or Square.
PLUMBAGO SHEET PACKING.
RAINBOW SHEET PACKING.
REGULAR SQUARE FLAX PACKING, in Box or on Reel.
RUBBER BESTOS SHEET PACKING.
SELDEN'S CANVAS CORE PACKING, in Coils.
SELDEN'S GUM CORE PACKING, in Coils.
SMOKY CITY PACKING.
SOAPSTONE PACKING.
TUPPER'S FLAX PACKING, in Box.
USUDURIAN SHEET PACKING, in Rolls.
VULCABESTOS ROPE PACKING.
VULCABESTOS SHEET PACKING.

We carry in stock, or can furnish to order, any of the above Packings. Prices upon application.



J-421. MAGNESIA-ASBESTOS, WITH CANVAS JACKET AND METAL BANDS.



J-428. STANDARD ASBESTOS LINED WOOL FELT, WITH SHEETING JACKET AND METAL BANDS.



J-424. ECLIPSE MINERAL WOOL.



J-430. COVERING FOR WATER PIPES.

*SECTIONAL COVERINGS FOR STEAM AND WATER PIPES.

MADE IN THREE-FOOT LENGTHS TO FIT ALL SIZES OF PIPE.

J-421. MAGNESIA-ASBESTOS is an all moulded covering, absolutely fire-proof. It is finished with Canvas Jacket with lap and Metal Bands.

J-424. MINERAL WOOL SECTIONAL AND BLOCK COVERINGS are made of the best grade of Rock Wool.

J-430. COVERING FOR WATER PIPES is made of Corrugated Wool Felt, ¼ inch thick, with an interlining of one layer of tar felt paper. FROST-PROOF COVERING is of Corrugated Wool Felt, 1 inch thick, with an interlining of two layers of tar felt paper.

J-428. STANDARD COVERING, for medium pressure, is of Corrugated Wool Felt, 1 inch thick, with an interlining of two layers of Asbestos Paper. THE EXPRESS, for low pressure, is of Corrugated Wool Felt, ⅝ inch thick, with one layer of Asbestos Paper.

ZERO COVERING is a special Frost-proof Covering, for severe temperatures. It is of Corrugated Wool Felt, ⅝ inch thick, with an interlining of ¼-inch Hair Felt, and is finished with canvas and metal bands. Seams and ends of sections should be cemented with hot pitch or asphaltum to prevent any openings in these coverings.

INSIDE DIAM. OF PIPE, INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10	12
PER LINEAL FOOT	.20	.22	.23	.24	.25	.27	.31	.36	.40	.44	.47	.50	.58	.70	.77	.84	1.00	1.20
ELBOW COVERS REGULAR OR 45 DEG. } EACH	.25	.25	.25	.25	.25	.27	.31	.36	.40	.44	.47	.50	.58	.70	.77	.84	1.00	----
TEE COVERS EACH	.33	.33	.33	.33	.33	.36	.41	.48	.53	.59	.63	.67	.77	.90	1.00	1.15	1.30	----
VALVE COVERS EACH	.25	.25	.25	.25	.25	.27	.41	.48	.53	.59	.63	.67	.77	.90	1.00	----	----	----
CROSS COVERS EACH	.35	.44	.44	.44	.44	.50	.54	.62	.70	.80	.85	.95	1.15	1.25	1.45	----	----	----

*The above list applies to all grades of Pipe Coverings, the different discounts regulating the net prices.

SECTIONAL COVERS FOR ELBOWS, TEES AND VALVES are made only of the Magnesia-Asbestos and the Standard Covering, either of which may be used with the Perfection or Eclipse Mineral Wool Covering.

BLOCK COVERING FOR BOILERS, BREECHING, HEATERS, TANKS, DRUMS, ETC.

MAGNESIA-ASBESTOS BLOCKS—Sizes, 4x18 inches or 6x36 inches: { 1½ inches thick, 30 cents per square foot. / 2 inches thick, 35 cents per square foot.

ECLIPSE MINERAL WOOL BLOCKS—Size, 8x18 inches: 1½ inches thick, 30 cents per square foot.

ASBESTOS CEMENT FELTING— Price, per bag, No. 1 Grade, $3.00

Elbows, Tees and Valves can be covered at comparatively little cost by using Asbestos Cement applied even with the pipe covering and finished with a trowel. Muslin or canvas jacket may be pasted over, when a uniform and durable finish is desired. One bag of Asbestos Cement will cover about 60 fittings, sizes up to 2-inch; larger sizes in proportion.

ASBESTOS MATERIALS.

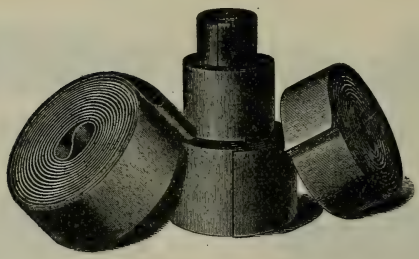
WICK PACKING, put up in ¼, ½ and 1-pound balls. STEAM ROPE PACKING, put up in 25 and 50-pound coils.

MILL BOARD, in sheets 40x40 inches, 1/32 to ¼-inch in thickness. LUBRICATED ROPE PACKING, put up in 25 and 50-pound coils.

GASKETS, any size or thickness, to order.

SHEATHING OR BUILDING FELT, in rolls 36 inches wide, weighing about 100 pounds, 1, 2, 3 or 4-ply.

CEMENT FELTING, for covering steam pipes, boilers, heaters, tanks, etc.; in barrels.



RUBBER BELTING.

SIZE INCHES	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8
2-PLY PER FOOT	.07	.09	.11	.15	.18	.22	.26	.30	.33	.36	.43	.51	.59
3-PLY PER FOOT	----	----	----	.17	.22	.26	.30	.34	.39	.43	.52	.60	.70
4-PLY PER FOOT	----	----	----	.21	.26	.31	.37	.42	.47	.52	.62	.73	.84
5-PLY PER FOOT	----	----	----	.26	.32	.38	.46	.52	.58	.65	.77	.91	1.05
6-PLY PER FOOT	----	----	----	.31	.39	.46	.55	.63	.70	.78	.93	1.09	1.26

SIZE INCHES	9	10	11	12	13	14	15	16	18	20	22	24	26
2-PLY PER FOOT	.67	.75	.83	.91	1.00	1.08	1.16	1.25	1.41	1.58	1.76	1.96	2.16
3-PLY PER FOOT	.80	.90	1.00	1.08	1.18	1.28	1.38	1.50	1.70	1.90	2.12	2.36	2.60
4-PLY PER FOOT	.95	1.07	1.18	1.30	1.42	1.54	1.66	1.78	2.02	2.26	2.52	2.80	3.08
5-PLY PER FOOT	1.18	1.33	1.47	1.62	1.77	1.92	2.07	2.22	2.52	2.82	3.15	3.50	3.85
6-PLY PER FOOT	1.42	1.60	1.77	1.95	2.13	2.31	2.49	2.67	3.03	3.39	3.78	4.20	4.62

Endless Belts made to order, for which there will be three extra feet charged for splice. We make three qualities of Belting, B. W. H. and Superior, both thoroughly guaranteed, and Tiger, guaranteed for light work only.

LEATHER BELTING, PURE OAK TANNED.

SIZE INCHES	1	1¼	1½	1¾	2	2¼	2½	3	3½	4	4½	5	5½
PER FOOT, SINGLE	.17	.23	.29	.35	.41	.47	.53	.64	.76	.87	.98	1.09	1.21

SIZE INCHES	6	7	8	9	10	11	12	13	14	15	16	17	18
PER FOOT, SINGLE	1.32	1.54	1.76	1.98	2.20	2.42	2.64	2.86	3.08	3.30	3.52	3.74	3.96

Double Belting, double the above list.

RAW HIDE CUT LACE.

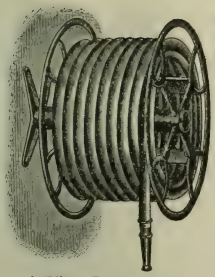
SIZE INCHES	¼	5/16	⅜	7/16	½	⅝	¾	1
PER 100 FEET	1.00	1.25	1.50	1.75	2.00	2.75	3.25	4.50

Double Belts twice the price of single. Extra Heavy Belts extra prices. We do not guarantee belts run on quarter turn, unless they are specially made for that purpose. We make two qualities of Leather Belting, Standard and Extra.

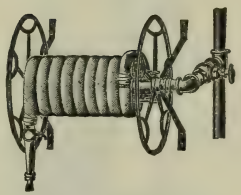
CANVAS STITCHED BELTING.

SIZE INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	14
4-PLY PER FOOT	.18	.23	.27	.32	.36	.41	.45	.54	.63	.72	.81	.90	1.08	----
6-PLY PER FOOT	----	----	.36	.42	.48	.54	.60	.72	.84	.96	1.08	1.20	1.44	1.68
8-PLY PER FOOT	----	----	----	----	----	----	----	----	----	----	----	----	1.80	2.10

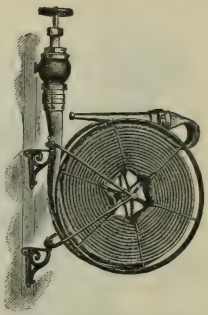
We make Canvas Stitched Belting in all widths to 60-inch. Send for Special Catalogue of Belting, Rubber Goods and Packing.



J-500. PLAIN WALL HOSE REEL.



J-502. STATIONARY HOSE REEL.



J-505. SWINGING HOSE WALL REEL.

WALL HOSE REELS.—J-500.

CAPACITY, 2½-INCH LINEN HOSE . . . . . FEET	150
EACH	10.00

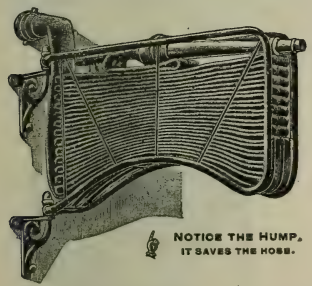
STATIONARY HOSE REELS.—J-502

SIZE INLET . . . . . INCHES	1½	2	3
EACH	20.00	25.00	30.00

J-502. Stationary Hose Reel has a Rotary Water Joint. The hose is connected to Reel by a Goose Neck to prevent it from kinking. It is ready for use, whether partly or all uncoiled.

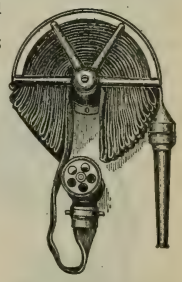
SWINGING HOSE WALL REELS.—J-505.

SIZE OF HOSE . . . . . INCHES	1¼–1½	2	2½	1¼–1½	2	2½	1¼–1½	2	2½	2½
CAPACITY, UNLINED LINEN HOSE . . . . . FEET	50	50	50	100	100	100	200	200	200	----
CAPACITY, RUBBER-LINED MILL HOSE . . . FEET	----	----	----	50	50	50	100	100	100	150
PRICE . . . . . EACH	6.00	6.00	6.00	6.00	6.00	6.50	7.50	8.00	8.50	11.50



J-508. HUMP SWINGING HOSE RACK.

Special sizes to order. Furnished with Wall Reel and finished in Vermilion, unless otherwise specified. If in gold or silver bronze, extra, 50 cents each, net; Nickel, Brass or Copper finish, extra 3.00 each, net. Pipe Clamps for 4-inch Pipe or smaller, extra per pair, 30 cents, net.



J-510. SADDLE RACK.

*HUMP SWINGING HOSE RACKS.—J-508.

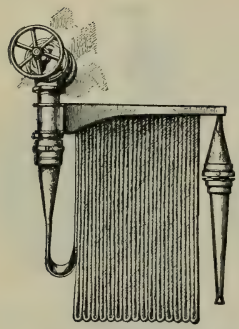
SIZE HOSE . . . . . INCHES	1½ or 2	2½	1½ or 2	2½	1½ or 2	2½
FULL CAPACITY . . . . . FEET	50	50	100	100	150	150
FOR UNLINED LINEN HOSE . . . . . EACH	5.00	5.00	6.00	6.00	7.00	7.00
FOR RUBBER-LINED OR MILL HOSE . . . . . EACH	7.00	7.00	7.50	8.00	----	----

The Hump Rack relieves pressure at the folds, preventing wear and cracking

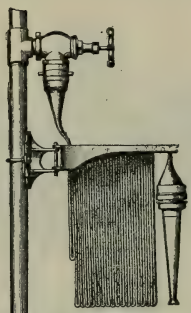
*SADDLE HOSE RACKS.—J-510.

FOR 1½, 2 OR 2½-INCH UNLINED LINEN HOSE, NOT OVER 200 FEET, ALUMINUM OR ANY COLOR ENAMEL . . . . . EACH	3.00

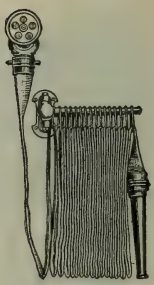
*In ordering Racks, always state for what size, kind and length of hose and whether for wall or standpipe. If for Standpipe, state size of Pipe.



†J-525. FOR WALL.



†J-527. FOR STANDPIPE.



J-530. BOYD SWINGING RACK.

HOWARD SWINGING HOSE RACKS.—J-525 and J-527.

*FINISH	RED JAPAN	ALUMINUM BRONZE	GOLD BRONZE	WHITE ENAMEL	N. P. IRON	POLISHED BRASS	N. P. BRASS	IRON OXIDIZED	BRASS OXIDIZED
FOR 50 FEET UNLINED LINEN HOSE. . . . . EACH	5.00	5.00	5.00	5.50	7.00	10.00	11.00	7.00	11.00
FOR 100 FEET UNLINED LINEN OR 50 FEET COTTON RUBBER LINED HOSE . . . . . EACH	6.00	6.00	6.00	6.50	8.00	12.00	13.00	8.00	13.00
FOR 150 FEET UNLINED LINEN OR 100 FEET COTTON RUBBER LINED HOSE . . . . . EACH	7.00	7.00	7.00	7.50	9.00	14.00	15.00	9.00	15.00

*Gold Stripe, extra, 50 cents.

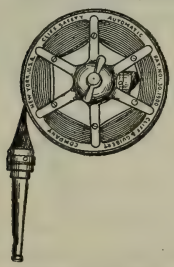
†Attachments for connecting Rack to Valve or Standpipe, J-525, each, 1.50; J-527, up to 4-inch, 80 cents; over 4-inch, 1.20.

The Hose is supported on the Howard Rack by means of wood pins ⅜-inch in diameter. These are shed from the Rack as the Hose is removed, rendering it impossible for the Hose to become tangled, although very rapidly released.

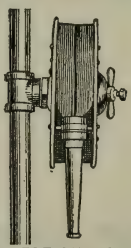
BOYD SWINGING HOSE RACKS.—J-530.

CAPACITY LENGTH OF HOSE . . . . . FEET	25 to 50	75 to 100
ALUMINUM FINISH OR ANY COLOR ENAMEL, EITHER WALL PLATE OR PIPE CLAMP PATTERN . . . . . EACH	4.00	5.00

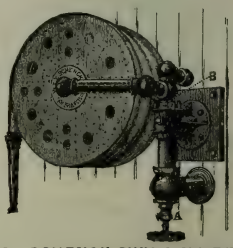
Hose is held on the Boyd Rack by Triangular Rings, which allow free and quick release in any direction.



J-535. FOR WALL.



J-538. FOR STANDPIPE.



J-542. SCHENCK SWINGING REEL.

CLIFF AUTOMATIC REELS.—J-535 and J-538.

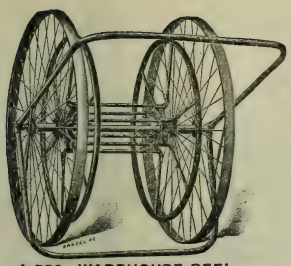
FOR HOSE . . . . . INCHES	1½	2	2½
FOR 25 OR 50 FT. UNLINED LINEN . EACH	13.50	16.25	21.00
FOR 75 OR 100 FT. UNLINED LINEN . EACH	14.50	17.00	22.75
FOR 125 OR 150 FT. UNLINED LINEN, EACH	15.50	17.80	24.30
FOR 200 FT. UNLINED LINEN . . . EACH	17.00	19.50	26.00
FOR 25 OR 50 FT. RUBBER LINED COTTON. . . . . EACH	17.00	19.50	26.00
FOR 75 OR 100 FT. RUBBER LINED COTTON. . . . . EACH	30.00	32.50	35.50

SCHENCK SWINGING HOSE REELS.—J-542.

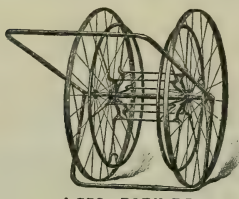
FOR HOSE . . . . . INCHES	1½	2	2½
FOR 50, 75 OR 100 FEET OF HOSE . EACH	35.00	35.00	40.00

In operating the Schenck Reel, first open the Valve, A, and water will reach the Nozzle as soon as the Hose is reeled off

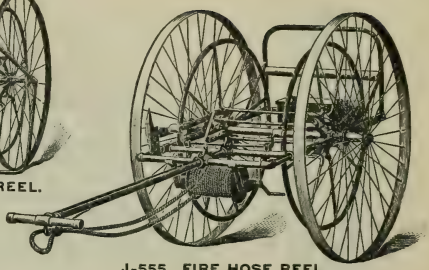
The Cliff Reel is positively automatic. Unwinding the Hose in any direction opens the Valve and turns on water. A full supply may be obtained through 50 feet of hose in 8 seconds and through 100 feet in 13 seconds.



J-550. WAREHOUSE REEL. FOR MILLS, FACTORIES AND VILLAGES.



J-552. PARK REEL.



J-555. FIRE HOSE REEL.

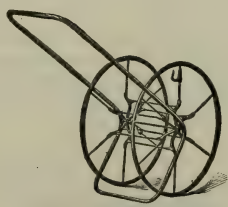
TUBULAR STEEL REELS.

FIGURE	J-550.			J-552.		*J-555.	
NUMBER	1	2	3	1	2	1	2
HEIGHT OF WHEEL . . . INCHES	42	48	52	28	34	52	60
OUTSIDE WIDTH OF WHEEL . . . INCHES	37½	40	46	-----	-----	------	------
SIZE OF TIRES . . . INCHES	-----	-----	-----	-----	-----	2½	2½
CAPACITY, ¾-INCH HOSE . . . FEET	-----	-----	-----	200	500	------	------
CAPACITY, 2-INCH RUBBER FIRE HOSE . . . FEET	-----	-----	-----	-----	-----	500	-----
CAPACITY, 2½-INCH RUBBER FIRE HOSE . . . FEET	150	300	500	-----	-----	450	500
CAPACITY, 2½-INCH COTTON RUBBER LINED HOSE . . . FEET	-----	-----	-----	-----	-----	700	750
CAPACITY, 2½-INCH UNLINED LINEN HOSE . . . FEET	-----	-----	-----	-----	-----	1000	1250
WEIGHT . . . POUNDS	130	180	200	40	50	------	------
PRICE . . . EACH	35.00	45.00	55.00	7.50	10.50	100.00	125.00

*J-555 Reels have Steel Wheels, Tubular Steel Frame and Reel, are light weight, easy running, and very strong. No. 1 includes Nozzle Holder, Friction Roller, Axe Rack, Tool Box and Rope Reel for 60 feet of ¾-inch rope. No. 2 also includes Fireman's Axe and 60 feet of rope.



J-560. SUPERIOR HOSE REEL.



J-563. TUBULAR REEL.



J-565. ALL METAL HOSE REEL.

GARDEN HOSE REELS.

J-560. DRUM HOSE REEL, SIZE NO. 1, CAPACITY 100 FEET 1-INCH OR 150 FEET ¾-INCH HOSE . . . EACH	5.00
J-560. DRUM HOSE REEL, SIZE NO. 2, CAPACITY 150 FEET 1-INCH HOSE OR 250 FEET ¾-INCH HOSE . . . EACH	5.50
J-563. TUBULAR REEL, SIZE NO. 1, CAPACITY 100 FEET ¾-INCH HOSE . . . EACH	3.50
J-563. TUBULAR REEL, SIZE NO. 2, CAPACITY 150 FEET ¾-INCH HOSE . . . EACH	4.00
J-565. ALL METAL TUBULAR FRAME . . . EACH	2.00
BANNER (NOT ILLUSTRATED), CAPACITY 100 FEET ¾-INCH HOSE . . . EACH	2.50



K-21.

ANTI-FREEZING WELL PUMPS.—K-21 and K-22.
WITH WROUGHT IRON SET-LENGTHS.

K-21 represents our new Improved Anti-Freezing Open Top Pump for wells of ordinary depth. The standard of this pump is a size smaller than the regular No. 4 set-length pump, and is made to meet the demand for a pump which can be sold at a lower price than the ordinary sizes.

The pipe connection is made under the spout, which prevents damage by frost. K-22 is same as K-21, except that it has a tight top, and handle and rod are attached to a toggle connection.

Number	Diameter Cylinder Inches	Size Pipe Inches	Stroke Inches	Iron Cylinder	
				K-21	K-22
2	2½	1¼	6	7.50	8.25
3	2¾	1¼	6	7.75	8.50
4	3	1¼	6	8.00	8.75



K-22.



K-25.

*IMPROVED HEAVY ANTI-FREEZING WELL PUMPS.—K-25 and K-26.
WITH WROUGHT IRON SET-LENGTHS.

K-25 represents our Heavy Drive Well Pumps, with wrought iron set-length screwed into the stock just below the spout. It has an open cup top and revolving bearer. This pump is one of the strongest and most reliable of our large line of lift pumps, and is especially adapted for deep wells; it is also fitted with improved rounded or flat iron or brass valve seats, as ordered. Can be used in wells 100 to 150 feet deep. Cylinder should be placed near or under water.

K-26 represents our Heavy Drive Well Tight Top Pump, which, with the exception of top, is the same pump as K-25. The rod and handle are attached to toggle connection.

The description of K-25 will apply to this pump.

All parts are lettered and numbered.

K-25 and K-26 have 6-inch stroke.

Number	Diameter Cylinder Inches	Size Pipe Inches	Iron Cylinder		Brass or Porcelain Lined Cylinder		Brass Tube Cylinder	
			K-25	K-26	K-25	K-26	K-25	K-26
2	2½	1¼	8.50	9.25	11.00	11.75	13.00	13.75
3	2¾	1¼	8.75	9.50	11.25	12.00	13.25	14.00
4	3	1¼	9.00	9.75	11.50	12.25	13.50	14.25
5	3½	1¼	9.50	10.25	12.00	12.75	14.00	14.75
6	3½	1¼	10.00	10.75	13.00	13.75	15.00	15.75
8	4	2	11.50	12.25	15.00	15.75	17.00	17.75

*When ordering state whether Brass Lined, Porcelain Lined or Brass Tube Cylinder is wanted.



K-26.



K-30. LIFT.

IMPROVED ANTI-FREEZING WINDMILL LIFT AND FORCE PUMPS.—K-30 and K-31.

WITH WROUGHT IRON SET-LENGTHS.

Our Improved Set-Length Windmill Pump, K-30, is well proportioned, handsome in appearance, strong and durable. It is well adapted for drive well purposes, and will work successfully in wells from 50 to 75 feet deep by lowering the cylinder to within 15 or 20 feet of the water. The set-length is connected at the spout.

K-31 shows another style of Windmill Force Pump. It has brass stuffing-box, brass hose coupling on spout and back outlet opposite spout. Can be used in wells from 75 to 125 feet deep.

We can furnish windmill pumps with round instead of flat rods, if desired, at same price.

All parts are lettered and numbered.

K-30 and K-31 have 6-inch stroke.

Number	Diameter Cylinder Inches	Pipe Size Inches	Iron Cylinder		Brass or Porcelain Lined Cylinder		Brass Tube Cylinder	
			K-30	K-31	K-30	K-31	K-30	K-31
2	2½	1¼	9.00	13.00	11.50	15.50	13.50	17.50
3	2¾	1¼	9.25	13.25	11.75	15.75	13.75	17.75
4	3	1¼	9.50	13.50	12.00	16.00	14.00	18.00
5	3¼	1¼	10.00	14.00	12.50	16.50	14.50	18.50
6	3½	1¼	10.50	14.50	13.50	17.50	15.50	19.50



K-31. FORCE.

IMPROVED WELL AND TUBULAR WELL FORCE PUMPS.—K-34 and K-35.

WITH WROUGHT IRON SET-LENGTHS.



K-34.

K-34 represents our New Improved Tubular Well Force Pump. The stock and air chamber are made in one piece with a tube extending downward through the latter, thus preventing the escape of air from the chamber and providing the best possible guide for the piston rod below the brass stuffing-box in the cap. The spout is arranged with a hose connection. By lowering the cylinder it can be used in wells 100 feet deep. It can be used as an ordinary lift pump by removing the brass thumb screw from air chamber.

If this pump is wanted fitted with cock spout add $2.50 to list price.

K-35 represents our Improved Well Force Pump with base cast on and with air chamber on spout. The rod is of polished steel and works through a brass stuffing-box. This pump is provided with hose coupling on spout, and has an adjustable bearer. It may be used in wells from 75 to 100 feet deep by lowering the cylinder to within about 20 feet of the water, or better still by placing cylinder under the water. When used as an ordinary lift pump, the nut on top of air chamber should be loosened.

All parts are lettered and numbered.

K-34 and K-35 have 6-inch stroke.

Number	Diameter Cylinder Inches	Pipe Size Inches	Iron Cylinder		Brass or Porcelain Lined Cylinder		Brass Tube Cylinder	
			K-34	K-35	K-34	K-35	K-34	K-35
3	2¾	1¼	12.25	14.75	14.75	17.25	16.75	19.25
4	3	1¼	12.50	15.00	15.00	17.50	17.00	19.50
5	3¼	1¼	13.00	15.50	15.50	18.00	17.50	20.00
6	3½	1¼	13.50	16.00	16.50	19.00	18.50	21.00



K-35.

In ordering, state whether Brass Lined, Porcelain Lined or Brass Tube Cylinder is wanted.



K-40.

ANTI-FREEZING DOUBLE-ACTING FORCE PUMPS WITH REVOLVING SPOUTS.—K-40 and K-41.

FOR SHALLOW AND DEEP WELLS

K-40 represents our Double-Acting Force Pump, which will meet the demand and requirements of a first-class pump. It is symmetrical, works easy, discharges a steady, smooth stream, and is Anti-Freezing. It is arranged with adjustable base and brace and has a large air chamber.

The upper cylinder is made of heavy, seamless drawn brass tubing. Each pump is supplied with our improved malleable hose attachment and suction strainer.

By placing a lower cylinder in or near the water, this pump can be used in wells 125 to 150 feet deep.

K-41 is the same pump as K-40, with the exception that it has a vertical three-way cock. With the aid of the three-way cock, water may be forced underground into tanks or cisterns.

All parts are lettered and numbered.

Number	Diameter Lower Cylinder Inches	Diameter Upper Cylinder Inches	Pipe Size Inches	Brass Cylinder		Brass Lined Cylinders	
				K-40	K-41	K-40	K-41
2	2½	1½	1¼	16.00	19.00	15.00	18.00
4	3	2	1¼	16.00	19.00	15.00	18.00
6	3½	2½	1½	17.00	20.00	16.00	19.00



K-41.



K-44.

ANTI-FREEZING DOUBLE-ACTING FORCE PUMPS.

K-44 and K-45.

WITH WINDMILL HEAD AND REVOLVING SPOUTS.

FOR SHALLOW AND DEEP WELLS.

K-44 represents our Double-Acting Force Pump, which is the same pump as K-40 above, except that it has a windmill head.

When used in deep wells the cylinder should be lowered to within ten or fifteen feet of the water, or, better still, placed in the water.

K-45 is the same pump as K-44, with the exception that it has a vertical three-way cock, with the aid of which water may be forced underground into tanks or cisterns.

Number	Diameter Lower Cylinder Inches	Diameter Upper Cylinder Inches	Pipe Size Inches	Brass Cylinders		Brass Lined Cylinders	
				K-44	K-45	K-44	K-45
2	2½	1½	1¼	17.00	20.00	16.00	19.00
4	3	2	1¼	17.00	20.00	16.00	19.00
6	3½	2½	1½	18.00	21.00	17.00	20.00

In ordering, state whether Brass or Brass Lined Cylinders are wanted.



K-45.


K-50.

IMPROVED THREE-WAY ANTI-FREEZING WINDMILL FORCE PUMPS.—K-50 and K-51.

WITH 6, 8 AND 10-INCH ADJUSTABLE STROKE.

K-50 represents our new Anti-Freezing Windmill Force Pump with adjustable stroke and three-way distributing valve. The stock is made of 2-inch pipe, otherwise the description of our K-54 applies to this pump.

K-51 is the same as K-50, except that it has an upper brass cylinder in place of stuffing-box. The bottom pipe connection is always fitted for 2-inch pipe unless otherwise specified. Round rod pumps furnished at the same list price when ordered. All parts are lettered and numbered. Windmill slides furnished only when ordered.

Number	Pipe Size Inches	Air Chamber Inches	K-50	K-51
1	2	1½	20.00	21.00
2	2	2	20.00	21.00


K-51.


K-54.

IMPROVED THREE-WAY ANTI-FREEZING WINDMILL FORCE PUMPS.—K-54 and K-55.

K-54 represents our new Anti-Freezing Windmill Force Pump, with three-way distributing valve. The water may be controlled by a slight turn of the hand wheel and discharged through the spout or forced under the ground through the brass elbow as shown in lower working head, which contains the distributing valve. By removing cap on lower working head and plate on platform, plungers from 2 inches to 3 inches in diameter can be drawn up and repaired without removing pump from well.

We make two sizes of this pump, designated as No. 1 and No. 2. The only difference being that No. 1 has 1½-inch air chamber, while No. 2 has 2-inch air chamber. The upper discharge is fitted for ¾-inch hose; the lower discharge at brass elbow is fitted for 1-inch pipe.

K-55 is same as K-54, except that it is arranged with a brass upper cylinder in place of stuffing-box and discharges a steady stream. Both of the above pumps are fitted with our adjustable bushings where rod passes through guide to take up wear and can be easily replaced. These pumps can be furnished with our new style round rod in place of flat rod at same price, when so ordered. Windmill slides furnished only when ordered.

All parts are lettered and numbered.

Number	6-Inch Stroke		10-Inch Stroke	
	Pipe Size Inches	K-54 and K-55	Pipe Size Inches	K-54 and K-55
1	1¼	17.00	2	18.50
2	1¼	18.00	2	19.50


K-55.



K-60.

IMPROVED STANDARDS, COMPLETE.—K-60 and K-61.
BASES CAST ON.

K-60 and K-61 are the standards used in the set-length pumps, K-21 and K-22, respectively. The former has an open and the latter a tight top. They are tapped for pipe just under the spout, and have bases cast on stock. These standards are used in wells over 30 feet deep, and where cylinders must be placed more than four feet below the platform.

All parts are lettered and numbered.

Stroke Inches	*Pipe Size Inches	K-60	K-61
6	1¼	4.50	5.25

*Fitted for any size pipe up to 2 inches when specified.



K-61



K-64.

IMPROVED STANDARDS, COMPLETE.—K-64 and K-65.
BASES CAST ON.

K-64 and K-65 are used in wells 50 feet deep, or more, in connection with our large line of iron and brass cylinders. Are tapped for pipe just under the spout.

All parts are lettered and numbered.

Number	Stroke Inches	*Pipe Size Inches	K-64	K-65
3	6	1¼	4.75	5.25
4	6	1¼	5.00	5.50
5	6	1¼	5.25	5.75
6	6	1¼	5.75	6.00



K-65.



K-68.

IMPROVED FORCE PUMP STANDARDS, COMPLETE.
K-68 and K-69.

K-68 represents our Force Pump Standard used in our set-length pump, K-34, and is fitted with brass hose coupling on spout, brass stuffing-box and polished rod, and is used in wells 30 feet or more in depth. The pipe is screwed into stock just under spout. This standard can be furnished with cock spout instead of plain as shown, by adding $2.50 to list.

K-69 shows our Improved Force Pump Standard with air chamber on spout and polished rod and links. It is tapped for wrought iron pipe just under the spout.

*Pipe Size Inches	Stroke Inches	K-68	K-69
1¼	6	9.00	12.00

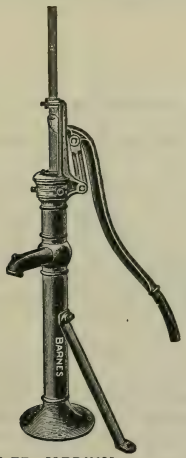
*Fitted for any size pipe up to 2 inches when specified.



K-69.



K-74. LIGHT.



K-75. MEDIUM.



K-76. HEAVY.

IMPROVED WINDMILL LIFT PUMP STANDARDS.

K-74, K-75 and K-76 represent our new Improved Windmill Lift Pump Standards. We can fit the 6-inch and 10-inch stroke pumps for 1¼-inch, 1½-inch or 2-inch pipe as ordered, but always fitted as described below, unless otherwise specified. Windmill slides will be furnished only when ordered. We can furnish above pumps with round rods at same price. All of our windmill standards are supplied with special bushings, which prevent the rod wearing on the bearer and can be easily replaced. All parts are lettered and numbered.

STYLE		K-74. Light	K-75. Medium	K-76. Heavy
6-INCH STROKE, *FITTED FOR 1¼-INCH PIPE	EACH	7.00	7.50	8.00
10-INCH STROKE, *FITTED FOR 2-INCH PIPE	EACH	----	8.50	9.00



K-79.

K-79 represents a Force Pump Standard with plain spout, brass stuffing-box and hose connection on spout, and is tapped for wrought iron pipe just under the spout. Each bearer is supplied at top with a special bushing which prevents the rod wearing on the bearer, and can be easily replaced. This pump is arranged with outlet back of spout. Windmill slides furnished when specified.

K-80 shows our Windmill Force Pump Standard, which is the same in all respects as K-79, except that it has a cock spout. The description of K-79 will apply as well to this pump.

STYLE		K-79	K-80
6-INCH STROKE, *FITTED FOR 1¼-INCH PIPE	EACH	10.00	12.50
10-INCH STROKE, *FITTED FOR 2-INCH PIPE	EACH	11.00	13.50

*Fitted for any size pipe up to 2 inches when so specified.



K-80.



K-85.

IMPROVED WINDMILL PUMP STANDARDS

WITH EXTRA LONG FULCRUM TO BASE.

K-85 represents our Windmill Lift Pump Standard, with long fulcrum extending to base. That part of the fulcrum below the bearer is made of ¾ black pipe, and is screwed into a casting at either end, thereby making it strong and rigid.

K-86 represents our Windmill Force Pump Standard, which has a long fulcrum extending to base. We fully describe this fulcrum in our description of K-85 above.

Round rods furnished instead of flat rods when desired.

All parts lettered and numbered.

FIGURE	K-85	K-86
*6 IN. STROKE, FITTED FOR 1¼-IN. PIPE, EACH	8.50	11.00
10-IN. STROKE, FITTED FOR 2-IN. PIPE, EACH	9.50	12.00

*Fitted for any size pipe up to 2 inches when specified.



K-86



K-89.

NEW HEAVY WINDMILL FORCE PUMP STANDARDS.

FOR TUBULAR WELLS FROM 2 TO 3 INCHES IN DIAMETER. WITH AIR CHAMBER IN STOCK.

K-89 represents our New Windmill Force Pump Standard, especially adapted for Tubular Wells, although it can be used for any kind of a well. The standard is made in two sections, having a flange bolted between the sections. The flange is threaded to receive the pipe, and can be tapped for any sized pipe from 1¼ to 3 inch inclusive. By removing the bolts from the flange the valves or tubular well cylinder can be easily drawn up through, should it be necessary for repairing. The bearer is fitted with hook bolts in place of set screws, and the stuffing-box is brass. The standard is heavy and substantially built throughout, and is particularly adapted for deep wells. Each bearer is supplied at top with a special bushing which prevents the rod wearing the bearer, and can be easily replaced. The back outlet is fitted for 1¼-inch pipe, but can be fitted for 1½ or 2-inch pipe if so ordered. The spout is fitted with brass hose connection.

K-90 is the same standard as K-89, except that it has a cock spout.

Windmill slides furnished only when ordered. Either of above standards furnished with round instead of flat rods at same price.

All parts are lettered and numbered.

Always state size of pipe Standard is to be fitted for, otherwise it will be tapped for 3-inch pipe.

FIGURE	K-89	K-90
6-INCH STROKE, COMPLETE	14.00	16.50
10-INCH STROKE, COMPLETE	15.50	18.00



K-90.


K-100.


K-101.


K-103.


K-104.


K-105.

ALL IRON PLUNGERS.

SIZE . . . . . INCHES	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	6
K-100. FOR 10-INCH CYLINDERS . . . . . EACH	.50	.55	.60	.65	.70	.75	.80	1.00	1.50	----	----
K-101 AND K-103. FOR 12 AND 14-INCH CYLINDERS . . . . . EACH	1.60	1.60	1.75	1.75	2.00	2.50	3.00	4.00	5.25	7.00	10.00
K-104 AND K-105. FOR 16 TO 22-INCH CYLINDERS . . . . . EACH	1.75	2.00	2.25	2.50	2.75	3.25	3.75	4.75	6.25	8.00	12.00

PLUNGERS WITH IRON FOLLOWERS, BRASS CAGE AND VALVES—AND ALL BRASS.

SIZE . . . . . INCHES	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	6
K-100. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . . . . EACH	1.15	1.15	1.25	1.35	1.50	2.00	2.50	3.00	----	----	----
K-101 OR K-103. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . EACH	2.50	2.50	2.75	2.75	3.00	3.75	4.50	6.00	8.00	10.50	15.00
K-104 OR K-105. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . EACH	2.65	2.90	3.25	3.50	3.75	4.50	5.25	6.75	9.00	11.50	17.00
K-100. WITH ALL BRASS PLUNGER . . . . . EACH	1.50	1.50	1.60	1.80	2.00	2.50	3.25	4.00	----	----	----
K-101 OR K-103. WITH ALL BRASS PLUNGER . . . . . EACH	3.00	3.00	3.25	3.50	4.00	5.00	6.00	8.00	10.50	14.00	20.00
K-104 OR K-105. WITH ALL BRASS PLUNGER . . . . . EACH	3.15	3.40	3.75	4.25	4.75	5.75	6.75	8.75	11.50	15.00	22.00


K-110.


K-115

IRON PUMP CYLINDERS—K-110 and K-115.

WITH K-100 PLUNGER, FOR SET-LENGTHS . . . . . SIZE, INCHES	2x10	2¼x10	2½x10	2¾x10	3x10	3¼x10	3½x10	4x10	4½x10	5x10	6x10
K-110. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1¼	1¼	1¼	1½	1½	2	2	2½	3
K-110. WITH ALL IRON PLUNGER . . . . . EACH	3.75	4.00	4.35	4.70	5.00	6.00	7.00	9.00	12.50	16.50	24.00
K-110. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . . EACH	4.50	4.75	5.35	5.70	6.25	7.50	8.75	11.50	15.75	20.50	29.00
WITH K-101 PLUNGER, FOR SHALLOW WELLS . . . . SIZE, INCHES	2x12	2¼x12	2½x12	2¾x12	3x12	3¼x12	3½x12	4x12	4½x12	5x12	6x12
K-110. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1¼	1¼	1¼	1½	1½	2	2	2½	3
K-110. WITH ALL IRON PLUNGER . . . . . EACH	5.50	5.75	6.00	6.50	7.00	8.00	9.00	11.50	15.00	20.00	28.50
K-110. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . . EACH	6.25	6.50	7.00	7.50	8.25	9.50	10.75	14.00	18.25	24.00	33.50
WITH K-101 PLUNGER, FOR SHALLOW WELLS . . . . SIZE, INCHES	2x14	2¼x14	2½x14	2¾x14	3x14	3¼x14	3½x14	4x14	4½x14	5x14	6x14
K-110. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1¼	1¼	1¼	1¼	1½	2	2	2½	3
K-110. WITH ALL IRON PLUNGER . . . . . EACH	6.00	6.25	6.50	7.00	7.50	8.75	10.00	13.00	17.50	22.50	33.50
K-110. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . . EACH	6.75	7.00	7.50	8.00	8.75	10.25	11.75	15.50	20.75	26.50	38.50
WITH K-104 PLUNGER, FOR DEEP WELLS . . . . . SIZE, INCHES	2x16	2¼x16	2½x16	2¾x16	3x16	3¼x16	3½x16	4x16	4½x16	5x16	6x16
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1¼	1¼	1¼	1¼	1½	2	2	2½	3
K-115. WITH ALL IRON PLUNGER . . . . . EACH	6.00	6.50	7.00	7.50	8.00	9.75	11.25	14.50	18.50	25.00	37.50
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . . EACH	6.75	7.25	8.00	8.50	9.25	11.25	13.00	17.00	21.75	29.00	42.50
WITH K-104 PLUNGER, FOR DEEP WELLS . . . . . SIZE, INCHES	2x18	2¼x18	2½x18	2¾x18	3x18	3¼x18	3½x18	4x18	4½x18	5x18	6x18
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1¼	1¼	1¼	1¼	1½	2	2	2½	3
K-115. WITH ALL IRON PLUNGER . . . . . EACH	6.75	7.00	7.50	8.00	8.50	10.75	12.50	16.00	22.50	30.00	42.50
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . . EACH	7.50	7.75	8.50	9.00	9.75	12.25	14.25	18.50	25.75	34.00	47.50

IRON PUMP CYLINDERS (Concl.)—K-110 and K-115.

WITH K-104 PLUNGER—FOR DEEP WELLS . . . . . SIZE—INCHES	2x20	2¼x20	2½x20	2¾x20	3x20	3¼x20	3½x20	4x20	4½x20	5x20	6x20
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH ALL IRON PLUNGER . . . . . EACH	7.50	8.00	8.50	9.00	9.50	11.50	13.50	17.00	25.00	34.00	50.00
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	8.25	8.75	9.50	10.00	10.75	13.00	15.25	19.50	28.25	38.00	55.00

IRON BODY BRASS LINED CYLINDERS.—K-110 and K-115.

WITH K-100 PLUNGER—FOR SET-LENGTHS . . . . . SIZE—INCHES	2x10	2¼x10	2½x10	2¾x10	3x10	3¼x10	3½x10	4x10	4½x10	5x10	6x10
K-110. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-110. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	7.50	7.75	8.00	8.50	9.00	9.75	10.50	13.00	20.00	26.50	40.00
K-110. WITH ALL BRASS PLUNGER . . . . . EACH	8.00	8.25	8.50	9.00	9.75	10.50	11.50	15.50	22.50	30.00	45.00
WITH K-101 PLUNGER—FOR SHALLOW WELLS . . . SIZE—INCHES	2x12	2¼x12	2½x12	2¾x12	3x12	3¼x12	3½x12	4x12	4½x12	5x12	6x12
K-110. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-110. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	8.00	8.25	8.50	9.00	9.50	10.25	11.25	14.25	22.00	30.00	45.00
K-110. WITH ALL BRASS PLUNGER . . . . . EACH	9.25	9.50	9.75	10.50	11.00	12.00	13.75	18.00	26.00	35.00	50.00
WITH K-101 PLUNGER—FOR SHALLOW WELLS . . . SIZE—INCHES	2x14	2¼x14	2½x14	2¾x14	3x14	3¼x14	3½x14	4x14	4½x14	5x14	6x14
K-110. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-110. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	8.50	9.00	9.25	9.75	10.25	11.00	12.25	15.75	24.00	33.00	50.00
K-110. WITH ALL BRASS PLUNGER . . . . . EACH	9.75	10.25	10.50	11.25	11.75	12.75	14.75	19.00	28.00	38.00	56.00
WITH K-104 PLUNGER—FOR DEEP WELLS . . . . SIZE—INCHES	2x16	2¼x16	2½x16	2¾x16	3x16	3¼x16	3½x16	4x16	4½x16	5x16	6x16
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	9.00	9.75	10.25	10.75	11.25	12.00	13.50	17.50	25.00	35.00	55.00
K-115. WITH ALL BRASS PLUNGER . . . . . EACH	10.50	11.25	11.75	12.25	12.75	14.00	16.00	20.50	30.50	42.00	62.00
WITH K-104 PLUNGER—FOR DEEP WELLS . . . . SIZE—INCHES	2x18	2¼x18	2½x18	2¾x18	3x18	3¼x18	3½x18	4x18	4½x18	5x18	6x18
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	9.50	10.50	11.25	11.75	12.25	13.00	14.75	19.25	30.00	40.00	60.00
K-115. WITH ALL BRASS PLUNGER . . . . . EACH	11.00	12.00	12.75	13.25	13.75	15.00	17.25	22.25	35.00	47.00	67.00
WITH K-104 PLUNGER—FOR DEEP WELLS . . . . SIZE—INCHES	2x20	2¼x20	2½x20	2¾x20	3x20	3¼x20	3½x20	4x20	4½x20	5x20	6x20
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	10.00	11.25	12.25	12.75	13.25	14.00	16.25	21.00	34.00	45.00	65.00
K-115. WITH ALL BRASS PLUNGER . . . . . EACH	11.50	12.75	13.50	14.25	14.75	16.00	19.00	24.00	39.50	52.00	72.00

SEAMLESS BRASS TUBE PUMP CYLINDERS.—K-115.

WITH K-104 PLUNGER—FOR DEEP WELLS . . . . . SIZE—INCHES	2x16	2¼x16	2½x16	2¾x16	3x16	3¼x16	3½x16	4x16	4½x16	5x16	6x16
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	9.00	9.75	10.25	10.75	11.25	12.00	13.50	17.50	25.00	35.00	55.00
K-115. WITH ALL BRASS PLUNGER . . . . . EACH	10.50	11.25	11.75	12.25	12.75	14.00	16.00	20.50	30.50	42.00	62.00
K-115. ALL BRASS . . . . . EACH	13.75	14.50	16.00	16.50	17.25	19.00	22.25	28.00	38.75	53.50	75.00
WITH K-104 PLUNGER—FOR DEEP WELLS . . . . SIZE—INCHES	2x18	2¼x18	2½x18	2¾x18	3x18	3¼x18	3½x18	4x18	4½x18	5x18	6x18
K-115. FITTED WITH IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	9.50	10.50	11.25	11.75	12.25	13.00	14.75	19.25	30.00	40.00	60.00
K-115. WITH ALL BRASS PLUNGER . . . . . EACH	11.00	12.00	12.75	13.25	13.75	15.00	17.25	22.25	35.00	47.00	67.00
K-115. ALL BRASS . . . . . EACH	14.25	15.25	17.00	17.50	18.25	20.00	23.50	29.75	43.25	58.50	80.00
WITH K-104 PLUNGER—FOR DEEP WELLS . . . . SIZE—INCHES	2x20	2¼x20	2½x20	2¾x20	3x20	3¼x20	3½x20	4x20	4½x20	5x20	6x20
K-115. FITTED FOR IRON PIPE . . . . . INCHES	1	1¼	1½	1½	1½	1½	1½	2	2	2½	3
K-115. WITH IRON FOLLOWER, BRASS CAGE AND VALVE . . EACH	10.00	11.25	12.25	12.75	13.25	14.00	16.25	21.00	34.00	45.00	65.00
K-115. WITH ALL BRASS PLUNGER . . . . . EACH	11.50	12.75	13.50	14.25	14.75	16.00	19.00	24.00	39.50	52.00	72.00
K-115. ALL BRASS . . . . . EACH	14.75	16.00	17.75	18.50	19.25	21.00	25.25	31.50	47.75	63.50	85.00
WITH K-104 PLUNGER—FOR DEEP WELLS . . . . SIZE—INCHES								4½x22	5x22	6x22	8x22
K-115. FITTED FOR IRON PIPE . . . . . INCHES								2	2½	3	4
K-115. WITH ALL BRASS PLUNGER . . . . . EACH								43.00	57.00	77.00	154.00
K-115. ALL BRASS . . . . . EACH								52.25	68.50	90.00	180.00

PITCHER SPOUT PUMPS.—K-125.

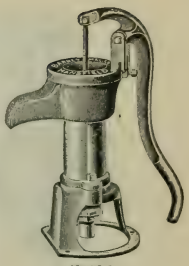


K-125.

K-125 represents our new style Closed Top Pitcher Spout Pump with revolving top, so that lever can be placed on any side of the pump, and is furnished with or without brass valve seats.

The new style top is a decided improvement over any other similar pump on the market.

NUMBER	1	2	3	4
DIAMETER CYLINDER . . . . INCHES	2½	3	3½	4
CAPACITY PER STROKE . . GALLONS	.09	.12	17	22
SUCTION . . . . . INCHES	1	1¼	1¼	1½
LIFT . . . . . FEET	25	25	25	25
IRON . . . . . EACH	4.25	4.75	5.25	6.25
BRASS LINED . . . . . EACH	6.50	7.25	8.00	9.00
PORCELAIN LINED . . . . . EACH	6.50	7.25	8.00	9.00



K-126.

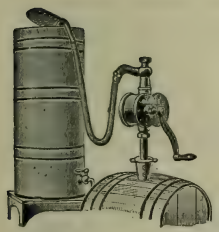
BRASS CYLINDER PITCHER SPOUT PUMPS.—K-126.

K-126 represents our Improved Closed Top Pitcher Pump with brass cylinder and brass plunger. The cylinder is made of heavy seamless brass tubing, which prevents any possibility of sand holes, a defect which is a common occurrence in cast brass cylinders. It is substantially built, and is a first-class pump in all respects. All parts are lettered and numbered.

WITH 3-INCH POLISHED BRASS CYLINDER . . . . . EACH	7.25
WITH 3-INCH NICKEL PLATED CYLINDER . . . . . EACH	8.25

Capacity and size connections of K-126 are same as K-125.

ROTARY BARREL FORCE PUMP.—K-129.
WITH IMPROVED BARREL ATTACHMENT OR HOLDER.

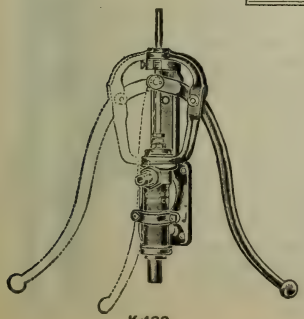


K-129.

This cut shows our Hand Rotary Pump arranged with an improvement for holding the suction pipe of the pump rigid in the bung of a barrel. The holder is a tapering sleeve in two halves, and can be used in barrels having any size of bung, from 2 to 3 inches in diameter. A suction pipe of three feet in length is furnished with each pump as well as a hose coupling. With this apparatus, fluids of any character or consistency can be pumped from a barrel, tierce or hogshead and forced into a reservoir or receptacle at any distance.

The prices given below include suction pipe, hose coupling and barrel attachment, no barrel or tank.

Number	Capacity per minute, 100 revolutions, gals.	Suction Pipe Size Inches	Discharge Size of Hose Inches	*Lift and Force Feet	Iron Each	Bronze Case and Cams Each	†Bronze Each
1	10	1	1	60	17.00	39.00	49.00
2	13	1	1	60	20.00	44.00	54.00
3	17	1¼	1¼	60	24.00	49.00	61.00



K-132.

*Total lift and force from supply to point of delivery, pump not more than 20 feet above fluid.

†Bronze pumps have all parts coming in contact with the liquid of bronze.

IMPROVED BRASS HOUSE FORCE PUMP.—K-132.

Designed for use in flat and tenement houses where the city water pressure is not sufficient to carry the water to the upper floors at all times.

DIAMETER CYLINDER . . . . . INCHES	1 13/16
CAPACITY PER STROKE . . . . . GALLONS	04
SUCTION, LEAD PIPE . . . . . INCHES	1
DISCHARGE, GAS PIPE . . . . . INCHES	1
LIFT AND FORCE . . . . . FEET	50
BRASS . . . . . EACH	10.00


K-137.


K-139.


K-141.

HOUSE FORCE PUMPS, WITH ADJUSTABLE BEARER AND BRASS PISTON ROD.—K-137.

NUMBER	1	2	3	4	5
DIAMETER OF CYLINDER . . . . . INCHES	2	2½	3	3½	4
SUCTION AND DISCHARGE, IRON PIPE SIZE . . . . INCHES	1¼	1¼	1¼	1¼	2
STROKE . . . . . INCHES	6	6	6	8	8
IRON . . . . . EACH	9.00	9.50	11.00	17.00	18.00
BRASS LINED . . . . . EACH	11.50	12.00	13.50	20.50	23.00
BRASS CYLINDER . . . . . EACH	13.50	14.00	16.00	24.00	30.00

HOUSE FORCE PUMPS.—K-139 and K-141.

NUMBER	1	2	3	4	5
DIAMETER OF CYLINDER . . . . . INCHES	2	2½	3	3½	4
SUCTION AND DISCHARGE, IRON PIPE SIZE . . . . INCHES	1¼	1¼	1¼	1¼	2
STROKE . . . . . INCHES	6	6	6	8	8
IRON . . . . . EACH	12.00	12.50	14.50	21.50	22.50
BRASS LINED . . . . . EACH	14.50	15.00	17.00	25.00	27.50
BRASS CYLINDER . . . . . EACH	16.50	17.00	19.50	28.50	34.50

HOUSE FORCE PUMPS, ON PLANK.

K-144.


K-144.

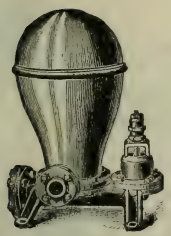
NUMBER	2	4	6
DIAMETER OF CYLINDER . . . . . INCHES	2½	3	3½
SUCTION AND DISCHARGE, FITTED FOR . . INCHES	1¼	1¼	1¼
STROKE . . . . . INCHES	7	7	7
IRON . . . . . EACH	15.50	16.50	22.00
BRASS LINED . . . . . EACH	18.00	20.00	26.50
BRASS CYLINDER . . . . . EACH	20.50	23.50	32.00

K-146.

NUMBER	2	4	6
DIAMETER OF CYLINDER . . . . . INCHES	2½	3	3½
SUCTION AND DISCHARGE, IRON PIPE SIZE . INCHES	1¼	1¼	1¼
STROKE . . . . . INCHES	7	7	7
IRON . . . . . EACH	20.00	21.00	28.00
BRASS LINED . . . . . EACH	22.50	24.50	32.50
BRASS CYLINDER . . . . . EACH	25.00	28.00	38.00

K-144 or K-146 furnished without plank at $1.00 less list.

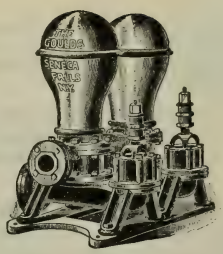

K-146.



K-151. SIZES NOS. 2 TO 8.



K-153. SIZES NOS. 9 TO 11.



K-155. DOUBLE RAM.

IMPROVED HYDRAULIC RAMS.—K-151 and K-153.

FOR SUPPLYING DWELLINGS, FACTORIES, RAILROAD STATIONS, STOCK YARDS, ETC., WITH RUNNING WATER.

NUMBER	2	3	4	5	6	7	8	9	10	11
SUPPLY PER MINUTE TO OPERATE RAM . . . . GALS.	1 to 2	2 to 4	3 to 7	6 to 10	11 to 25	20 to 40	25 to 75	11 to 25	20 to 40	25 to 75
LENGTH OF DRIVE PIPE . . FEET	50 to 75	50 to 75	50 to 100	50 to 150	50 to 200	50 to 200	50 to 200	50 to 200	50 to 200	50 to 200
SIZE OF DRIVE PIPE . . INCHES	¾	1	1¼	2	2½	3	4	2½	3	4
SIZE OF DISCHARGE PIPE, INCHES	½	½	¾	1	1¼	1½	2	1¼	1½	2
K-151. WITH LEATHER VALVE, EACH	9.00	11.00	14.00	22.00	40.00	75.00	125.00	----	----	----
K-153. WITH BRASS SPRING VALVE . . . . EACH	----	----	----	----	----	----	----	45.00	80.00	130.00

IMPROVED HYDRAULIC DOUBLE RAMS.—K-155.

NUMBER	6	7	8
SUPPLY PER MINUTE TO OPERATE RAM . . . . GALLONS	11 to 25	20 to 40	25 to 75
LENGTH OF DRIVE PIPE . . . . FEET	50 to 200	50 to 200	50 to 200
SIZE OF DRIVE PIPE . . . . INCHES	2½	3	4
SIZE OF DISCHARGE PIPE . . . . INCHES	1½	2	2½
K-155. WITH BRASS SPRING VALVE . . . . EACH	90.00	160.00	260.00

THE HYDRAULIC RAM, AS WE BUILD IT to-day, represents the most efficient and automatic labor-saving device known for raising water any distance where a sufficient supply and head are attainable, and the slight expense for first outlay and maintenance considered render them most desirable for supplying running water in any quantity to residences, villages, etc. With an experience of 35 years in their manufacture, and a practical knowledge of the requirements necessary for their successful operation, we are able to offer the most perfect and efficient Ram in the market. Our castings are all heavy in pattern and of proportionate strength. The air chambers are larger than those of any other Ram, thus relieving it of all undue strain and aiding its working, while the valve stem and case (made of best bronze metal) are of a new and improved design calculated to develop the greatest possible efficiency.

HEAD OF FALL OF DRIVE PIPE.—Rams will work, and successfully, where the spring or brook is only 3 feet higher than the Ram; yet, as the height or head increases, the more powerfully the Ram operates, and its ability to force water to greater elevation and distance correspondingly strengthens. The best wearing results will be secured where the head of fall does not exceed 10 feet. The head on the discharge pipe may be from five to ten times the head on the drive pipe.

Thus, as shown in our Table of Tests, we have a varying head of 10 to 25 feet, proportioned to height water is to be raised and quantity required. As a specific example, we might say a fall of 10 feet from the brook or spring to the Ram is sufficient to raise water to any point, say, 150 feet above the machine, while the same amount of fall would also raise water to a point considerably higher, though the quantity of water discharged will be proportionately diminished as the height and distance increase.

Rule for determining the amount of water delivered from a given supply, viz.: Multiply the number of gallons supplied to the Ram per minute by 3, and this product by the number of feet in head, or fall of drive pipe, and divide by four times the number of feet the water is to be raised. The result is the number of gallons raised per minute.

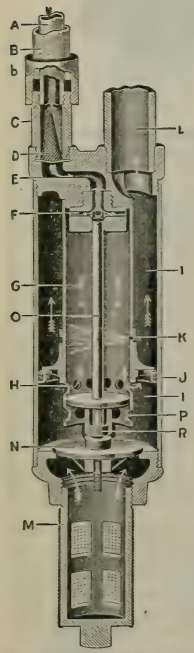
EXAMPLE.—With a supply of 10 gallons per minute delivered to Ram, under a head of fall of 10 feet, how much water can be raised to an elevation of 100 feet: $\frac{10 \times 3 \times 10}{100 \times 4} = .75$ gallon per minute.

SELECTION OF RAMS.—Size of Ram to be used can be easily found from tables given in connection with each Ram, after the amount of water that can be depended on for the supply is ascertained, or, where this is in excess of needs, from the delivery required.

THE ERWIN STEAM RAM.

(PATENTED IN 1895 BY JAMES B. ERWIN AND WM. KIRKWOOD.)

FOR ELEVATING WATER FOR APARTMENT BUILDINGS, RESIDENCES, SUMMER RESORTS, HOTELS FACTORIES, FARM USE, STOCK YARDS, RAILROAD TANKS, CEMETERIES, MINING AND IRRIGATION PURPOSES, STEAMBOATS, VILLAGES, ETC.



K-265. SECTIONAL. THE ERWIN STEAM RAM.

The Erwin Steam Ram is simple in construction, economical in use of steam, and requires no packing, no oil, no attention. It is suitable for tubular and other wells, and for raising water from cisterns, lakes or streams.

We recommend our Standard Rams for forcing water to heights up to 60 feet, and similar sizes of our Low-lift Rams for elevating larger quantities to heights up to 40 feet. Capacities range from 400 to 10,000 gallons per hour.

When the Erwin Steam Ram is at work, the water is elevated or forced by the alternate action of Steam and Atmospheric Pressure. The steam having first driven the water from the Ram, is instantaneously condensed and a vacuum is formed. A volume of water is then driven into the Ram by atmospheric pressure, and not only fills the vacuum chamber, but a large proportion passes on through the Ram and into its discharge pipe. The steam and air thus co-act to make the discharge of water continuous. To the facts that a good portion of the work is done by the atmosphere and that friction is almost entirely eliminated, the high efficiency of the Ram is largely due.

The Ram is placed beneath the surface of the water in the well or other source of supply and, before starting, water flows into it by gravity.

When steam is turned on it passes through the steam pipe A, nipple C, conical screen D, the main steam port E and radial steam ports F into the cylinder G. The water is then forced downward through the openings H into the surrounding discharge chamber I, where it passes through the annular check valve J and out of the discharge pipe L.

When the steam reaches the lower end of the cylinder G, it is exhausted through the large openings H much faster than it is admitted through the small steam ports F, is condensed in the surrounding water chamber I and a partial vacuum is formed within the cylinder G. The formation of the vacuum is made more complete by a spray of water which then rushes inward from the discharge chamber I through the small opening K. The instant a vacuum is created and condensation occurs, the pressure of the atmosphere on the water outside of the Ram forces the water upward through the bottom strainer M. The main check valve N then rises and the valve rod O, which is rigidly attached to it, shuts off the steam at the upper end of the cylinder. A volume of water under atmospheric pressure is at the same time forced upward through the discharge chamber and out through the discharge pipe. A portion of this water, however, passes through the openings P, forces up the float R, which moves freely on the valve rod O, and refills the cylinder. The water under atmospheric pressure having then lost in momentum, the steam acting downward on the valve rod closes the main check valve and through pressure exerted on the float again forces water out of the cylinder and through the discharge chamber and discharge pipe.

A covering pipe B surrounds the steam pipe for the distance it is submerged beneath water to prevent condensation and is received into a coupling C.

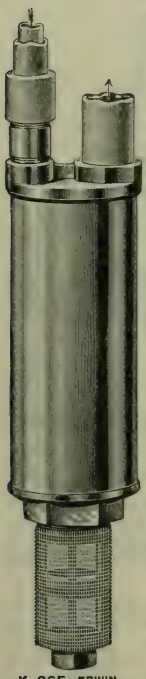
Our Low-lift Rams will raise larger quantities of water, up to a height of 40 feet, than our Standard Rams of like diameter, but without as high economy for, while the steam cylinder is larger, the Low-lift Ram has no Spray Opening or Annular Check Valve.

Send for Special Catalogue of the Erwin Steam Rams

THE ERWIN SINGLE STEAM RAMS.

On account of their small diameter the Single Rams may be suspended from their steam and water pipes below the surface of the water in small tubular wells in addition to other places.

The Rams are made of Brass with Steam Metal Bearings. The Strainer is of Malleable Iron with a Brass Screen. All parts are built interchangeable and put together with the utmost care. Each Standard Ram is adapted and tested, before leaving the shop, for raising water up to 60 feet above the Ram itself, and each Low-lift Ram for elevating water 40 feet above itself. The capacities given below are all estimated on a 40-foot elevation with 75 pounds steam pressure.



K-265. ERWIN SINGLE STEAM RAM.

THE ERWIN SINGLE STEAM RAMS.—K-265.

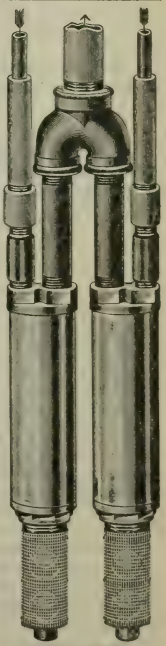
STYLE	Standard.					Low Lift.	
SIZE NUMBER	A2	A2½	A3	A4	A5	C3	C5
STEAM PIPE INCHES	¼	⅜	⅜	½	¾	½	1
COVERING PIPE INCHES	½	¾	¾	1	1¼	1	1½
DISCHARGE PIPE INCHES	¾	1	1	1½	2	1½	2
INLET PIPE INCHES	1	1½	1½	2	3	1½	3
CAPACITY PER HOUR GALLONS	440	660	1100	1680	3300	1500	5000
DIAMETER INCHES	2	2½	3	4	5	3	5
HEIGHT INCHES	10	12	12	14	17	12	17
APPROXIMATE SHIPPING WEIGHT POUNDS	5	11	13	22	31	12	29
PRICE EACH	25.00	30.00	35.00	50.00	60.00	35.00	60.00

The height of the Ram does not include bottom Strainer, but this and the Steam Pipe Nipple, with its screen only, are supplied with each one.

THE ERWIN DOUBLE STEAM RAMS.

We recommend our Double Rams where an unfailing water supply is demanded and for greater capacities than those afforded by the Single Rams.

The Double Rams, which are twice the capacity of the single ones, are formed by connecting the discharge pipes of two Single Rams with a common Discharge Chamber. The Rams forming the combination have separate Steam Pipes but a common Discharge Pipe. While they work in unison in forcing water, either one can be shut down by turning off its steam valve, without stopping the other. In this way they differ from ordinary duplex pumps, where only one cylinder at a time forces water and where, if any part should give out, both cylinders would become inoperative. Our Double Rams are made of Brass and Steam Metal with the exception of the Strainer and the Discharge Chamber with its connections, which are of Iron.



K-270. ERWIN DOUBLE STEAM RAM.

THE ERWIN DOUBLE STEAM RAMS.—K-270.

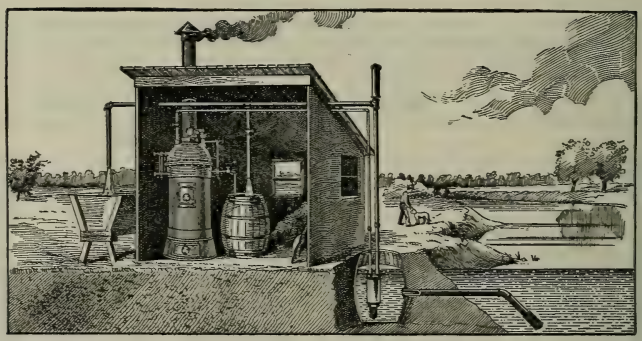
STYLE	Standard.					Low Lift.	
SIZE NUMBER	B2	B2½	B3	B4	B5	D3	D5
EACH STEAM PIPE INCHES	¼	⅜	⅜	½	¾	½	1
EACH COVERING PIPE INCHES	½	¾	¾	1	1¼	1	1½
DISCHARGE PIPE INCHES	1	1¼	1½	2	2½	2	3
EACH INLET PIPE INCHES	1	1½	1½	2	3	1½	3
CAPACITY PER HOUR GALLONS	880	1320	2200	3360	6600	3000	10000
*HEIGHT INCHES	17	20	21	24	28	21	28
*WIDTH INCHES	5	6	7	9	11	7½	11
APPROX. SHIPPING WEIGHT POUNDS	15	28	32	52	72	30	68
PRICE EACH	55.00	65.00	75.00	110.00	130.00	75.00	130.00

*The height given is the distance between the top of the Discharge Chamber and the bottom of the Rams without the Strainers, and the width is the extreme horizontal measurement when the two Rams are connected abreast. The price includes only the Rams, with Steam Pipe Nipples and Screens, bottom Strainers and Discharge Chamber with Tubes connecting it to the Rams.

Send for Special Catalogue of the Erwin Steam Rams.

THE ERWIN STEAM RAMS.

TAKING WATER FROM A LAKE OR STREAM



K-272.

As here illustrated, our Steam Ram can be advantageously used for pumping water from a lake or stream. The Boiler is protected by a shed and the water pumped into a sluiceway and thus conveyed wherever desired.

THE ERWIN PUMPING SYSTEMS.

The Erwin Pumping Systems consist of our smaller Standard Single Steam Rams (see pages 314 and 315) together with our "Triumph" Water Tube Safety Boilers (see page 197). They are intended for elevating water from wells, cisterns, etc., for country residences, farms, summer resorts, and other places. The Boilers are also suitable for heating water and many other purposes. (See applications of the Erwin Pumping Systems as illustrated above and in Special Booklet, THREE HYDRAULICS, describing our Pumping Devices.)

THE ERWIN PUMPING SYSTEMS.

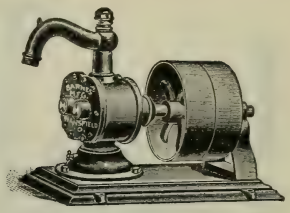
SIZE — NUMBER	E 2	E 2½	E 3
DIAMETER OF BOILER — INCHES	14	16	21
HEIGHT OF BOILER — INCHES	48	50	60
SIZE OF SMOKE STACK — INCHES	6	6	7
DIAMETER OF RAM — INCHES	2	2½	3
HEIGHT OF RAM — INCHES	10	12	12
STEAM PIPE FOR RAM — INCHES	¼	⅜	⅜
DISCHARGE PIPE FOR RAM — INCHES	¾	1	1
COVERING PIPE FOR RAM — INCHES	½	¾	¾
INLET PIPE FOR RAM — INCHES	1	1¼	1¼
CAPACITY OF RAM IN GALLONS — PER HOUR	440	660	1100
APPROXIMATE SHIPPING WEIGHT OF RAM AND BOILER — POUNDS	380	485	900
PRICE OF RAM AND BOILER	70.00	85.00	110.00

Every Ram is supplied with a Strainer and Steam Pipe Nipple with Screen. The Boiler fixtures furnished consist of an ash-box, grate, grate rest, shaker, injector with connecting pipes, steam and water gauges, gauge cocks, lever safety valve and blow-off valve. Size No. 3 also has a smoke pipe damper with rod and flame deflector. When specially requested we will furnish the Boiler with a hand pump in place of an injector at the same price. No steam or discharge pipe or valves for same are included in above prices.

For full particulars send for Special Catalogue of the Erwin Steam Rams.



K-285. HAND ROTARY PUMP.



K-287. POWER ROTARY PUMP.

K-285 represents our Hand Rotary Force Pump. It is adapted for every place or purpose where a lift or force pump can be used, and will pump from a well or cistern, or can be moved to any place where water is not more than 15 to 20 feet distant, and operated instantly. It will pump hot water equally as well by the addition of a metallic lower valve. For wine or liquor a bronze pump should always be used, as it is unaffected by the action of acids.

K-287 represents our Rotary Force Pump on heavy cast-iron frame, with tight and loose pulleys for power. Its internal construction is exactly similar to that of K-285, previously described, and arranged this way it is capable of constant and productive work; used extensively in creameries, breweries, oil refineries, wine cellars and factories. Beyond the pulleys is a strong bearing with babbitt-lined boxes in which the driving shaft runs. The shaft is also made long enough to take a balance wheel beyond the bearing, but this wheel is only furnished at extra price. This pump will be found serviceable for furnishing a large volume of water under low pressure. The top cap on upper discharge may be placed on end of spout and liquid discharged vertically.

ROTARY FORCE PUMPS, HAND AND POWER.—K-285 and K-287.

No.	Capacity per Minute, 100 Revolutions	Suction, Inches	Discharge, Inches	*Lift and Force	K-285. Each		K-287. Each	
					Iron	†Bronze Parts	Iron	†Bronze Parts
1	10 gals.	1¼	1	60 ft.	20.00	42.00	27.00	49.00
2	13 "	1¼	1	60 "	23.00	47.00	32.00	56.00
3	17 "	1½	1¼	60 "	27.00	52.00	38.00	63.00
4	27 "	‡2	1½	60 "	35.00	65.00	48.00	78.00
5	36 "	2	2	60 "	40.00	75.00	54.00	90.00
6	45 "	2½	2½	60 "	50.00	100.00	80.00	135.00

*Total lift and force from supply to point of delivery. †Bronze Pumps have bronze cases, cams and spouts. ‡Size of suction on K-285, number 4, is 1½ inches.



K-290.

HYDRAULIC PRESSURE OR TEST PUMPS.—K-290.

No.	Diam. Ram. Inches.	Stroke. Inches.	Suction and Discharge.	Working Pressure.	Each.
0	¾	5	1-inch Pipe	700 pounds	18.50
1	1	5	1-inch Pipe	550 pounds	19.00
2	1¼	5	1-inch Pipe	400 pounds	19.50
3	1½	5	1-inch Pipe	200 pounds	21.00

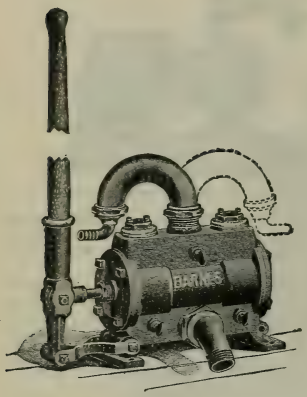
GAS DRIP PUMPS.—K-295.

No.	Diam. Cyl. Inches.	Stroke. Inches.	Capacity per Stroke.	Suction. Inches.	Each.
0	2	9	.12 gal.	¾	12.00
2	2½	9	.19 gal.	¾	16.00

K-295. is our Plumbers' and Gas Companies' Drip Pump for extracting the water from gas drips. These Pumps have brass cylinders, brass valves and plunger rod, glands, etc. Suction is regularly fitted for wrought-iron pipe, unless otherwise ordered.



K-295.



K-305. FAVORITE TANK PUMP.



K-308. MONARCH TANK PUMP.

K-305 represents our New Improved Favorite Tank Pump, which is superior to any other pump on the market for the purpose for which it is intended. The Favorite is easily operated, and will discharge about 2½ barrels of water per minute; has a 5-inch polished cylinder, brass valve seats and full 2-inch openings. The top attachments are arranged so they can be easily removed with either a wrench or a common piece of bar iron, and the valves have a small catch on the top so they can be lifted out with the fingers. The suction is fitted for 2-inch hose and the discharge for 1-inch hose. By removing the hose attachments the pump is arranged so that iron pipe can be connected. The goose neck spout is reversible, and can be placed in any position. If wanted for filling a tank in an attic or other purpose, the goose neck can be removed and iron pipe connection made in its place. The pump is supplied with brass drip cocks, and is anti-freezing. The Favorite is the only tank pump made so that plunger can be taken out without removing the valves. The Favorite pump is so arranged that the handle may be operated from either end. Other pumps of similar design are made so that the plunger strikes the valves on full stroke and soon ruins the leather crimps, necessitating repairs.

Furnished in all brass, for pumping acids, to order.

K-308 represents our New Improved Monarch Tank Pump, which is easily operated, and is well adapted for washing out boilers and for other purposes. It has raised valve seats, and will be found an excellent pump in all respects, having a capacity of two barrels per minute. Is fitted for both hose and iron pipe.

Our Tank Pumps can be used for washing out boilers, spraying fruit trees or for fire purposes. Can furnish pump with brass lined cylinder, when so ordered. Suction strainers are furnished with each pump without extra charge.

FIGURE NUMBER	K-305	K-308
DIAMETER OF CYLINDER . . . . . INCHES	5	4½
STROKE . . . . . INCHES	5	4½
SUCTION, HOSE OR IRON PIPE . . . . . INCHES	2	2
PUMP AND STRAINER ONLY . . . . . EACH	18.00	18.00

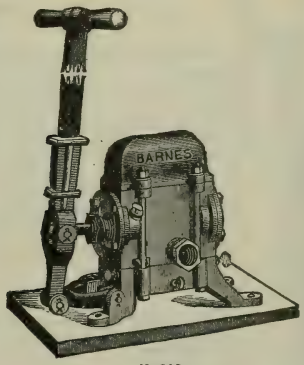
	K-305	K-308
No. 1. Thresher Tank Pump, with 15 feet 2-inch spiral wired suction hose, 10 feet 1-inch 3-ply discharge hose, clamps, suction strainer and nozzle, all complete, ... each,	$40.00	$40.00
No. 2. Thresher Tank Pump, with 20 feet 2-inch spiral wired suction hose, 10 feet 1-inch 3-ply rubber discharge hose, clamps, suction strainer and nozzle, all complete, ... each,	45.00	45.00
No. 3. Thresher Tank Pump, with 25 feet 2-inch spiral wired suction hose, 10 feet 1-inch 3-ply discharge hose, clamps, suction strainer and nozzle, all complete, ... each,	50.00	50.00

Discharge, 1-inch Hose or 2-inch Iron Pipe.

These Pumps can be furnished with Brass Lined Cylinder by adding $8.00 to above list prices.



K-314.
"VIM" HORIZONTAL FORCE PUMP.



K-316.
"MOHICAN" HORIZONTAL FORCE PUMP.

"VIM" HORIZONTAL DOUBLE-ACTING FORCE PUMP.—K-314.

WITH AIR CHAMBER, REVERSIBLE LEVER AND SUCTION AND DISCHARGE ON BOTH SIDES.

This cut represents our new "Vim" Horizontal Double-Acting Force Pump, with 3-inch polished iron or brass-lined cylinder and brass valve seats. It has a large capacity and operates unusually easy. It is especially adapted for lifting and forcing water from cisterns to tanks in attics of residences; also for deck pump, fire pump, spraying pump and for a variety of other purposes. It occupies a floor space of 7x18 inches. Suction and discharge openings fitted for iron pipe on both sides of cylinder. Always fitted for iron pipe unless otherwise ordered, but can be furnished for either hose or lead pipe. All brass pumps, for pumping acids, furnished to order.

"VIM" DOUBLE-ACTING FORCE PUMP.—K-314.

Number	Diameter Cylinder Inches	Stroke Inches	Capacity Per Stroke Gallons	Suction Pipe Size Inches	Discharge Pipe Size Inches	Iron Each	Brass-Lined Each
4	3	4½	.27	1¼	1	18.00	21.00

For Hose or Lead Pipe Connections, add to list, $2.00.

"MOHICAN" DOUBLE-ACTING HORIZONTAL FORCE PUMP.—K-316.

K-316 represents our New Improved "Mohican" Double-Acting Force Pump of great compactness and power, for use on ship-board, wharves, around factories, mills, warehouses, etc., and in residences for domestic water supply.

Piston rods and valve seats are brass, cylinders either brass lined or brass, therefore working parts are non-corrosive. At each end of pump are brass plugs for emptying it of water to prevent freezing, while there is another larger plug for priming the pump when necessary. The valves are readily exposed by unscrewing the brass nuts on side of air chamber. The lower valves are accessible by the removal of the body of the pump.

We always fit suction and discharge for iron pipe, unless otherwise specified. Pumps fitted with fibrous or metallic packed pistons to order. Furnished with or without plank at same price. A malleable wrench fitting all nuts and couplings sent with each pump.

High or vertical air chamber furnished at same price when so ordered.

"MOHICAN" DOUBLE ACTING FORCE PUMP.—K-316.

Number	Diameter Cylinder Inches	Stroke Inches	Suction Pipe Size Inches	Discharge Pipe Size Inches	Brass-Lined Cylinder Inches	Brass Cylinder Each	All Brass Each
2	2½	4½	1¼	1	27.00	55.00	75.00
4	3	4½	1¼	1	28.00	55.00	75.00
8	4	4½	1½	1¼	30.00	60.00	90.00
12	5	5	2	1½	40.00	90.00	150.00
16	6	5	2½	2	50.00	120.00	185.00

WOOD PUMPS.


K-320.

NUMBER A-1.

LENGTH . . . FEET	6	7	8
SIZE . . . INCHES	8x8	8x8	8x8
SIZE OF TUBING . . . INCHES	4½x4½	4½x4½	4½x4½
SIZE OF TENONS . . . INCHES	4	4	4
SIZE OF BORE . . . INCHES	5	5	5
PRICE, PLAIN . . . EACH	8.50	9.50	10.50
PRICE, PORCELAIN LINED . . . EACH	10.50	11.50	12.50
PRICE, WITH BRASS CYLINDER . . . EACH	11.50	12.50	13.50

NUMBER A-2.

LENGTH . . . FEET	6	7	8	10	12
SIZE . . . INCHES	7x7	7x7	7x7	7x7	7x7
SIZE OF TUBING . . . INCHES	4x4	4x4	4x4	4x4	4x4
SIZE OF TENONS . . . INCHES	3½	3½	3½	3½	3½
SIZE OF BORE . . . INCHES	4	4	4	4	4
PRICE, PLAIN . . . EACH	7.00	7.75	8.50	9.50	-----
PRICE, PORCELAIN LINED . . . EACH	8.75	9.50	10.00	11.25	12.50
PRICE, WITH BRASS CYLINDER . . . EACH	9.75	10.50	11.00	12.25	13.50

NUMBER A-3.

LENGTH . . . FEET	6	7	8	10	12	14	16
SIZE . . . INCHES	6x6	6x6	6x6	6x6	6x6	6x6	6x6
SIZE OF TUBING . . . INCHES	4x4	4x4	4x4	4x4	4x4	4x4	4x4
SIZE OF TENONS . . . INCHES	3½	3½	3½	3½	3½	3½	3½
SIZE OF BORE . . . INCHES	3½	3½	3½	3½	3½	3½	3½
PRICE, PLAIN . . . EACH	5.50	6.00	6.50	7.50	8.50	9.50	10.50
PRICE, PORCELAIN LINED . . . EACH	7.00	7.50	8.00	9.00	10.00	11.00	12.00
PRICE, WITH BRASS CYLINDER . . . EACH	8.00	8.50	9.00	10.00	11.00	12.00	13.00

NUMBER A-4. CISTERN PUMPS.

LENGTH . . . FEET	6	7	8
SIZE . . . INCHES	5x5	5x5	5x5
SIZE OF TUBING . . . INCHES	3½x3½	3½x3½	3½x3½
SIZE OF TENONS . . . INCHES	3	3	3
SIZE OF BORE . . . INCHES	3	3	3
PRICE, PLAIN . . . EACH	4.50	4.75	5.00
PRICE, PORCELAIN LINED . . . EACH	6.00	6.25	6.50
PRICE, WITH BRASS CYLINDER . . . EACH	7.00	7.25	7.50

WOOD SUCTION TUBING. STEAM TESTED.

SIZE . . . INCHES	4¼x4¼	4x4	3½x3½
SIZE OF BORE . . . INCHES	2¼	1¾	1⅝
SIZE OF TENONS . . . INCHES	4	3½	3
PRICE, 12-FOOT LENGTHS AND UNDER . . . PER FOOT	.22	.17	.13
PRICE, OVER 12-FOOT LENGTHS . . . PER FOOT	.24	.19	.14

WOOD PUMP EXTRAS.

HANDLES FOR

Covered Brackets, each, .50
Open Brackets . each, .40

BRACKETS.

Covered . each, .50
Open . . each, .40

BANDS.

Each 13

HANDLE LINKS.

Each 30

COUPLINGS.

For 5x5 Tubing . . . . each, .60
For 4¼x4¼ Tubing . . . each, .60
For 4x4 Tubing . . . . each, .50
For 3½x3½ Tubing . . . each, .40

PLUNGERS.

3-inch	3½-inch	4-inch	5-inch
Each, .65	80	1.00	1.25

CHECK VALVES.

For 4¼x4¼ Pipe . per doz., 2.00
For other sizes . per doz., 1.50

SPOUTS.

Iron, for A-1 Pump . each, .35
Iron, for other sizes . each, .30
Wood, for A-1 Pump . each, .20
Wood, for other sizes . each, .15



K-325.

PERFECTION ALL-BRASS BUCKET SPRAYING PUMPS.

The Perfection is the simplest and best Spraying Pump ever placed on the market. It is made of seamless brass tubing without threads on either end, and is held firmly together by a galvanized steel rod connected at the top and bottom parts, and is perfectly tight. Spraying Pumps of this kind are usually made of brazed tubing with threads cut on the ends so they can be screwed into the top and bottom castings, and it is impossible to take such a pump apart after it has been used without stripping the threads or breaking off the ends of the tubes. Users of Spraying Pumps will at once appreciate the improved features of the Perfection. A circular containing receipts and other information is furnished with each pump

K-327 represents our Perfection Spraying Pump, which is the same in all respects as K-325, except that it is arranged with Malleable Iron Foot Rest. It will be found a convenient device for steadying the pump and holding it in the proper position.



K-327.

PERFECTION SPRAYING PUMPS.—K-325 and K-327.

FIGURE	K-325	K-327
WITH THREE FEET RUBBER HOSE AND TWO NOZZLES, COMPLETE . . . . . EACH	4.00	4.50
WITH THREE FEET RUBBER HOSE AND VERMOREL NOZZLE, COMPLETE . . . . . EACH	5.00	5.00



K-330.

MEYERS LEVER BUCKET SPRAY PUMPS—K-330.

This pump has all the advantages of the ordinary barrel pump and bucket pump combined, and is sold at a moderate price. Has one-half more air chamber than any other make of bucket pump. Is made of brass with ball valves; handle and foot rest are malleable iron.

The work is all done on the down stroke of the handle, and it can be operated with one-third the power required for any other bucket spray pump.

It is no experiment. It has been thoroughly tested and is an excellent article.

When used as a barrel pump, detach the foot rest and attach pump to top of barrel.

BARNES PORTABLE HYDROJECT.

K-332 represents our Portable Hydroject. It is a very effective force pump, weighing only about eight pounds. It can be carried about anywhere without the least difficulty. It is adapted for spraying fruit trees, washing windows, wagons, sprinkling lawns, conservatories, gardens, and for incipient fires. With each pump is sent suction and discharge hose connected, so that it requires no labor to put in immediate operation. Longer length of hose can be furnished if desired. Pump has brass cylinder, plunger and rod.



K-332.

MEYERS LEVER BUCKET SPRAY PUMPS.—K-330.

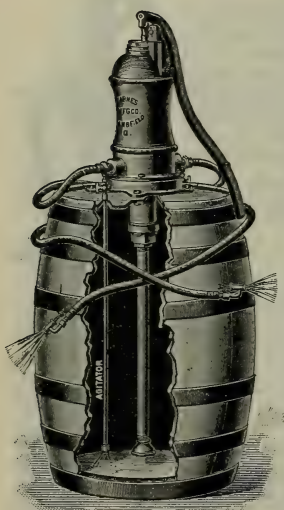
WITH AGITATOR, COMPLETE WITH HOSE AND GRADUATING VERMOREL, FINE, COARSE SPRAY AND SOLID STREAM NOZZLE	EACH	6.00
WITH AGITATOR, COMPLETE WITH HOSE, GRADUATING VERMOREL, FINE, COARSE SPRAY AND SOLID STREAM NOZZLE, AND AN 8-FOOT PIPE EXTENSION	EACH	6.50

If Bordeaux nozzle, instead of Vermorel, is wanted, please specify. Always use Pipe Extension; the results are better.

BARNES PORTABLE HYDROJECT.—K-332.

WITH 2¼ FEET ¾-INCH SUCTION AND 3 FEET ¾-INCH DISCHARGE HOSE, BRASS DISCHARGE PIPE AND SPRINKLER	EACH	7.50
EXTRA FOR CONICAL TIP TO USE IN FORCING OUT PIPES	NET	1.00

THE BARNES NEW IMPROVED BARREL SPRAY PUMP.—K-338.



K-338.

K-338 represents our New Improved Barrel Spray Pump with brass upper and brass-lined lower cylinders, brass plunger, brass check valve and brass valve seats. All working parts coming in contact with the liquid are brass. The body of the pump is a large air chamber, and after the pump is under pressure it will discharge a steady spray lasting two minutes or more with one stroke of the handle, thus making it easy to operate. This pump has no stuffing-boxes or other intricate parts to get out of order. It is double-acting, discharging half of the water on the up stroke and half on the down stroke of the handle. Each pump is fitted with a jet agitator or can be furnished with a paddle agitator, if preferred, at an extra charge. This pump is built on the best mechanical principles and has no equal as a first-class, high-grade sprayer. The ease with which it is operated makes it a general favorite, and we guarantee it to give perfect satisfaction. It can be used for many other purposes besides spraying, such as washing windows, buggies, extinguishing fires, sprinkling lawns, flowers, etc.



K-341.

NO. 1. PUMP, JET AGITATOR, SUCTION PIPE AND BRASS STRAINER (NO HOSE OR BARREL) . . . . EACH	11.50
NO. 2. PUMP AND TRIMMINGS COMPLETE, LESS BARREL, WITH ONE PIECE, 5 FEET, ¼-INCH HOSE AND VERMOREL NOZZLE . . . . . EACH	14.00
NO. 3. PUMP AND TRIMMINGS COMPLETE, LESS BARREL, WITH TWO PIECES, 5 FEET EACH, ¼-INCH HOSE AND VERMOREL NOZZLE . . . . . EACH	16.00

If Pump is wanted with Paddle Agitator, add $1.00 to list. Additional ½-inch Hose, per foot, 18 cents, list.

THE MONARCH SPRAYING PUMPS.—K-341.

The Monarch has two Improved Spraying Nozzles, and sprays two rows of trees or vines at the same time. Has a seamless brass cylinder 8 inches long, with solid brass plunger and rod, brass valves without leather or rubber, and brass screw spout with stop cock. The mechanical agitator keeps the water and poison well mixed.

The agitator works in connection with cogs from the lever, connecting with a companion gear at the upper end of the steel shaft; at the lower end of the shaft is a horizontal wooden bar. Thus when the lever is moved upward or downward the agitator bar travels in a semicircle in bottom of cask and prevents the poison from settling.

This pump has a long lever, works easily and is guaranteed in every respect.

The air chamber is large, which insures an even flow, and the stop cock on the spout is a valuable feature of this pump. Weight, not including barrel, 55 pounds.

When not wanted for spraying, the agitator may be disconnected, and this pump can be used for any purpose about the farm. It will pump acid, oil or water.

In mounting this pump on the barrel, bore the hole for agitator rod exactly in center of the head.

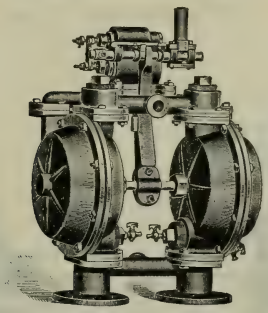
Price includes galvanized iron suction pipe, brass strainer (no barrel).

NO. 1. PUMP LESS HOSE AND NOZZLES, WITH DOUBLE BRASS SPOUT . . . . . EACH	16.00
NO. 2. PUMP WITH 10 FEET OF HOSE, ONE VERMOREL NOZZLE AND SINGLE BRASS SPOUT . . EACH	18.00
NO. 3. PUMP WITH TWO 10-FOOT PIECES OF HOSE, TWO VERMOREL NOZZLES AND DOUBLE BRASS SPOUT . . . . . EACH	20.00

Bordeaux Nozzles will be furnished in place of Vermorel, if preferred, at same price. Galvanized Extension Tubes, 8 feet long, 80c. list.

Vermorel Nozzles, each $1.00 list. Bordeaux Nozzles, each $1.00 list.

Fifty-gallon oil barrels (not new), repainted, clean and in good order, $2.00 net.



K-400.

THE CLOW WATER ELEVATOR.

The Clow Water Elevator is a Pump operated entirely by water power. It is used to pump water from cisterns and to increase the elevation of water from city mains. For the latter purpose it is extensively used in apartments, private residences and manufacturing concerns where running water is desired on upper floors, but where the city pressure is not sufficient to force water the required height.

What it will do. It will raise cistern water as high as the city water will flow. When used for increasing city water pressure in high buildings it will double the normal pressure of the city mains, raising the water to twice the height it would flow if unaided. It raises cistern water two feet for every pound pressure of city water mains. One distinct advantage of the Clow Elevator over all other systems is that the power water required is only quantity for quantity; other systems requiring twice as much water for power to elevate double height as the quantity supplied for use.

Its Economy. When city water is metered, the expense of the water used for power becomes an important item. In many cases the cost of city water practically prohibits the use of all water-power devices. By use of the Clow Elevator, however, the waste is reduced to a minimum and the cost for operating becomes a nominal figure.

A Tank usually unnecessary. In private residences and places where the quantity used is not great, the tank can be dispensed with, as the opening of a faucet starts the Elevator and water can be drawn as desired. The expense of a tank is thus saved. Where the demand is considerable, however, as in apartment, hotel and office buildings, where several are liable to be drawing water at the same time, we recommend the use of a tank. Then, no matter how many faucets are opened, the supply is ample and the pressure good.

Where there is no City Water. When city water is not available for power, as in country residences where the hard water is pumped into an elevated tank, the Clow Elevator may be used to excellent advantage for pumping cistern water or for increasing the elevation of the hard water. In such a case, the power water is drawn from the elevated tank, to which it has previously been raised by some pumping device, such as an Erwin Steam Ram or a windmill. The method of operation is the same as when city water is used for power, the water from the tank being utilized to operate the diaphragms, and the cistern or hard water being drawn into the water elevator by suction and then forced out into the supply pipes.

CLOW WATER ELEVATORS.—K-400.

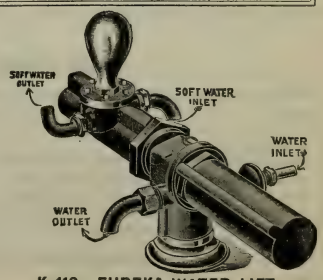
APPROXIMATE SHIPPING WEIGHT	POUNDS	190
PRICE	EACH	60.00

Send for special Booklet explaining method of operation.

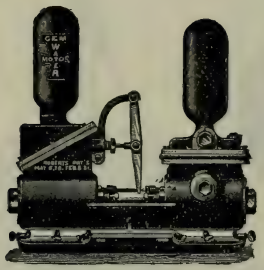
THE EUREKA WATER LIFT.—K-410.

NUMBER	1	2	5	3	4
SIZE INLET INCHES	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$
LENGTH INCHES	20	20	23	24	24
HEIGHT INCHES	13	13	17	18	18
PRICE	50.00	50.00	70.00	90.00	90.00

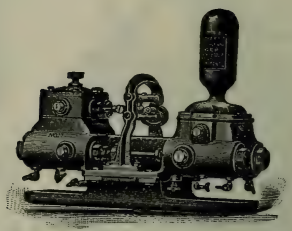
Descriptive Circular sent upon application.



K-410. EUREKA WATER LIFT.



K-415. GEM WATER MOTOR



K-418. DUPLEX GEM MOTOR.

GEM AND DUPLEX WATER MOTORS.

FIGURE		K-415			K-418		
NUMBER		1	2	3	1	2	3
PRICE	EACH	40.00	45.00	50.00	50.00	52.50	55.00
SUPPLY PIPE	INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
EXHAUST PIPE	INCHES	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
SUCTION PIPE	INCHES	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
DISCHARGE PIPE	INCHES	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
HEIGHT OVER ALL	INCHES	$15\frac{1}{2}$	$16\frac{1}{2}$	$17\frac{1}{2}$	$13\frac{1}{2}$	$13\frac{1}{2}$	$13\frac{1}{2}$
LENGTH OVER ALL	INCHES	$15\frac{1}{2}$	$15\frac{1}{2}$	$15\frac{1}{2}$	17	17	17

No. 1 Gem Water Motors, either single or Duplex, should generally be used where the operating pressure is not less than 40 pounds to the square inch. The engine and pump cylinders being the same size, it will pump 100 gallons for every 100 gallons used.

No. 2 Gem Water Motors are designed for places where the water pressure is below 40 pounds and over 25 pounds. The engine uses nearly two gallons for each gallon pumped, but will force water to a greater height than No. 1, with the same pressure.

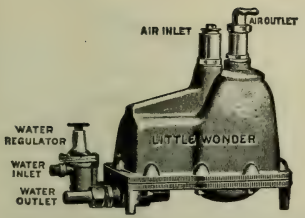
No. 3 Gem Water Motors will carry water to a still greater height with the same pressure and should be used where the operating pressure is less than 25 pounds. This size uses two and one-half gallons for each gallon pumped.

CLOSE ELBOW UNIONS FOR CONNECTING MOTORS.

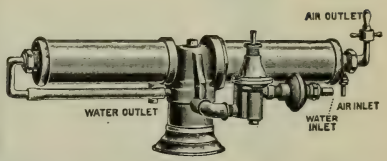
SIZE	INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$
ROUGH BRASS	EACH	1.00	1.20	1.50	2.00	2.75
UNIONS REQUIRED FOR A SET, K-415, NO. 1	NUMBER AND SIZES	1	1	2	----	----
UNIONS REQUIRED FOR A SET, K-415, NO. 2	NUMBER AND SIZES	----	1	3	----	----
UNIONS REQUIRED FOR A SET, K-415, NO. 3	NUMBER AND SIZES	----	1	3	----	----
UNIONS REQUIRED FOR A SET, K-418, EACH SIZE	NUMBER AND SIZES	----	3	1	----	----

With these Unions all the pipes can be connected behind the Motor, leaving the front clear and without any projecting pipes.

AIR COMPRESSORS.



K-424. LITTLE WONDER AIR COMPRESSOR.



K-427. COMPOUND EUREKA AIR COMPRESSOR.

LITTLE WONDER AIR COMPESSORS.—K-424.
HEIGHT 12 INCHES, BASE 11X6 INCHES.

PRICE	EACH	35.00

The Little Wonder will give one pound of air pressure for each pound of water pressure up to 30 pounds and for each cubic foot of air compressed will use one cubic foot of water. It works automatically and should be used with an air storage tank.

BIG WONDER AIR COMPRESSORS.

HEIGHT 18 INCHES, BASE 15½ X 7 INCHES	EACH	60.00

The Big Wonder is constructed the same as the Little Wonder but is of five times its capacity and especially suited for establishments requiring a large volume of air.

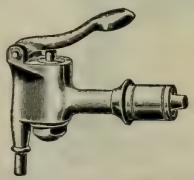
COMPOUND EUREKA AIR COMPRESSORS.—K-427.

BRASS	EACH	50.00	NICKEL PLATED	EACH	55.00

The Compound Eureka Air Compressor is very powerful in its operation and will give about two pounds of air pressure for every pound of water pressure, using two cubic feet of water for every cubic foot of air compressed. It will be found specially desirable for use where a high air pressure is necessary and should be used with an air storage tank.



K-430. DOUBLE OSCILLATING AIR COMPRESSOR, WITH HAND PUMP.



K-433. AUTOMATIC AIR CUT-OFF.

DOUBLE OSCILLATING AIR COMPRESSORS.—K-430.

NO. 1. AS SHOWN	EACH	60.00
NO. 2. AS SHOWN, EXCEPT WITH PULLEY FOR POWER, IN PLACE OF FLY WHEEL	EACH	60.00
NO. 3. WITHOUT TANK, FOR HAND PUMP	EACH	33.00
NO. 4. WITHOUT TANK, FOR POWER	EACH	33.00

Forty pounds pressure can be obtained in 10 minutes with this apparatus.

AUTOMATIC AIR CUT-OFFS.—K-433.

PRICE	EACH	4.00

This Cut-off is made on a new principle, being provided with a rubber disc instead of a ground-in cock, and is guaranteed to be absolutely tight.

No scaffolds or ladders needed. Dark places quickly made light, cheerful and sanitary.

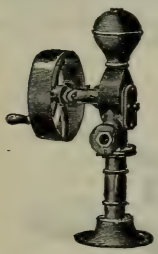


K-440.
WHITEWASH MACHINE.

Great saving in time and expense over the old way of whitewashing with brushes.

NUMBER	1	2	3	4
NUMBER OF MEN WITH BRUSHES MACHINE IS EQUAL TO IN SAME TIME	25	20	12	8
AMOUNT OF ½-INCH SPECIAL DISCHARGE HOSE . . . . . FEET	20	20	10	10
NET WEIGHT . . . . . POUNDS	80	70	60	50
COMPLETE . . . . . EACH	70.00	60.00	50.00	40.00

EQUIPMENT.—Each machine is furnished complete with spray pipe, two nozzles, 200-pound pressure gauge, special galvanized sieve, follower wrench, and suction and discharge hose. Directions for operating on special circular. The discharge hose has an extra heavy and long shank that will not pull off when clamped on.



K-445. PISTON PUMP FOR HAND.

VERTICAL PISTON PUMPS.—K-445 and K-448.

FOR HAND OR POWER.



K-448. PISTON PUMP FOR POWER.

DIAMETER OF CYLINDER . . . . . INCHES	3	3½
SUCTION FITTED FOR PIPE . . . . . INCHES	1¼	1½
DISCHARGE FITTED FOR PIPE . . . . . INCHES	1¼	1½
STROKE . . . . . INCHES	6	6
K-445. FOR HAND . . . . . EACH	27.00	30.00
K-448. FOR POWER, WITH CRANK SHAFT AND PULLEYS . . . . . EACH	32.00	35.00

If wanted with brass-lined cylinders, add 5.00 to above list prices.

K-445 represents our Vertical Power Force Pump, adapted for drawing water from cisterns, shallow wells and streams where the vertical suction lift is not over 25 feet.

K-448 is the same pump as K-445, except with tight and loose pulleys.

When so ordered either of the above pumps can be furnished with guide in place of plunger, and lower valve for use in wells more than 25 feet deep, so that a cylinder can be placed down near or under the water. Liquids may be forced to an elevation of 50 feet or less.



K-455. BASIN PUMP, NICKEL PLATED.



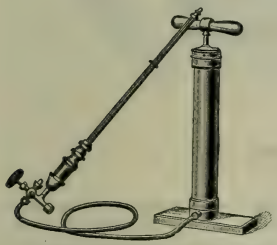
K-457. FORCE PUMP.



K-459. WITH STIRRUP.

BASIN AND FORCE PUMPS.

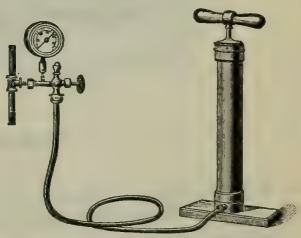
FIGURE	K-455	K-457	K-459
EACH	11.00	12.00	15.00



K-462. WITH MERCURY GAUGE.



K-464. AIR TEST PUMP.



K-466. WITH AIR GAUGE.

GAS PROVING PUMPS.

K-462. COMPLETE	EACH	25.00
K-462. MERCURY GAUGE, WITH COCK AND ETHER CUP	EACH	10.00
K-464 PUMP, WITH HOSE	EACH	15.00
K-466. COMPLETE	EACH	30.00



K-470. GAS MAIN CLEARING PUMP.

GAS MAIN CLEARING PUMPS.—K-470.

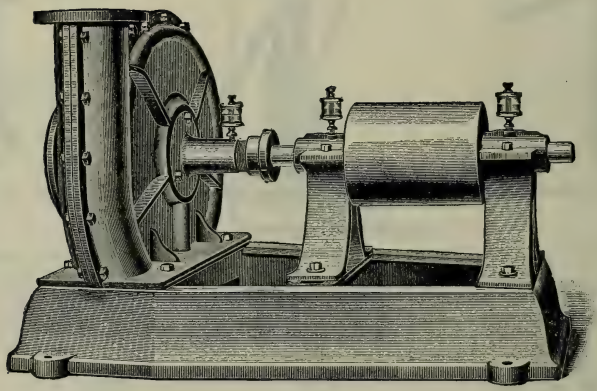
COMPLETE	EACH	30.00

This Pump is made to meet every requirement of the trade, both as to convenience and efficiency, and is by all means the best method of clearing Waste and Service Pipes.

The Cylinder is of Copper, with Pump and Valves of Brass, all substantially constructed and tested at 100 pounds pressure.

EXTRA PARTS FOR GAS PROVING PUMPS.

ETHER CUP ONLY	EACH	.50
MERCURY CUP ONLY	EACH	4.00
GLASS TUBE ONLY	EACH	1.00



K-500.

HORIZONTAL CENTRIFUGAL PUMP.

K-500 illustrates our Horizontal Right Hand Centrifugal Pump. They are used for pumping mines, coffer-dams, quarries, wells, and in fact to pump under all conditions of low lift and especially where muddy water is to be handled.

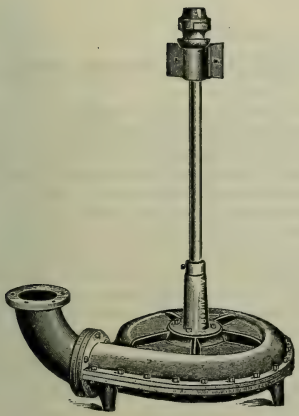
The suction pipe is to be attached to the center of pump at the end, and extend downward or to one side into the water to be pumped. A foot valve should be used on suction to maintain the priming of pump, and a priming pipe and valve is usually attached to suction pipe so pump may be primed from any convenient supply. These pumps are well and strongly made and not liable to get out of order.

FURNISHED:—Pump as shown with pulley and required oil cups on bearings.

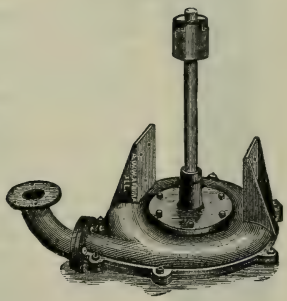
To make complete plant, power, driving belt, suction pipe, foot valve and primer (if wanted) should be added.

HORIZONTAL CENTRIFUGAL PUMPS.—K-500.

NUMBER	1	2½	3	4	5	6	8	10	12
SIZE DISCHARGE PIPE . . . . . INCHES	1	2½	3	4	5	6	8	10	12
SIZE SUCTION PIPE . . . . . INCHES	1¼	3	3½	4½	6	7	9	12	13
MAXIMUM CAPACITY IN GALLONS PER MINUTE	50	450	650	1250	1850	2600	4750	7500	9500
HORSE POWER REQUIRED EACH FOOT LIFT	.06	.19	.27	.50	.76	1.10	1.90	3.15	3.90
DIAMETER OF PULLEY . . . . . INCHES	3	7	7	8	10	12	18	20	24
FACE OF PULLEY . . . . . INCHES	2	6	7	10	10	12	12	12	14
DIAMETER OF SHAFT . . . . . INCHES	¾	1¼	1½	1½	1⅞	1⅞	2⅛	2¼	2 1/16
FLOOR SPACE . . . . . INCHES	12x12	24x38	25x39	30x40	34x54	37x55	45x63	51x71	62x78
APPROXIMATE WEIGHT . . . . . POUNDS	50	360	450	600	900	1050	1700	2300	3300
PRICE . . . . . EACH	26.00	80.00	95.00	130.00	165.00	200.00	310.00	395.00	500.00



K-510.



K-512.

VERTICAL CENTRIFUGAL PUMPS.—K-510 and K-512.

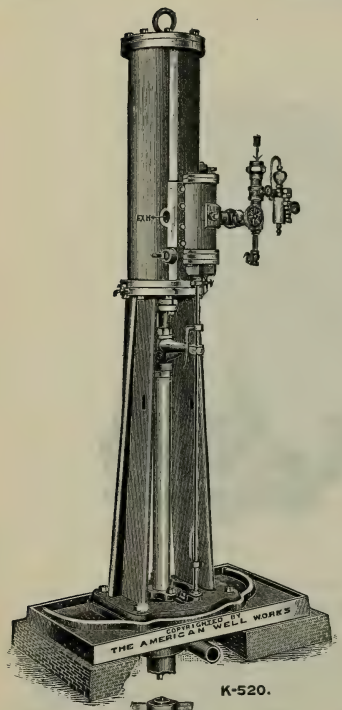
K-510 and K-512 illustrate our Vertical Centrifugal Pumps. They are used for pumping mines, coffer-dams, quarries, irrigation wells, in fact, to pump under all conditions of low lift where the pump may be submerged in the water. K-512 has lugs so it may be suspended on timbers which carry the driving shafting above. K-510 stands on bottom of pit, or by adding pipe threaded suction attachment to center of bottom, may be screwed to a tube well for rice irrigation. These pumps for handling muddy or sandy water are unexcelled. The construction is simple and there is practically nothing to get out of order or need repairs.

FURNISHED:—Pump complete as shown together with pulley. (K-512 has the shaft coupling completed.)

VERTICAL CENTRIFUGAL PUMPS.—K-510 and K-512.

NUMBER	2	2½	3	4	5	6	8	10	12	15
SIZE DISCHARGE PIPE . . . . . INCHES	2	2½	3	4	5	6	8	10	12	15
ECONOMICAL CAPACITY IN GALLONS PER MINUTE	300	450	650	1250	1850	2600	4750	7500	9500	15000
HORSE POWER REQUIRED EACH FOOT LIFT . . .	.125	.19	.27	.50	.76	1.10	1.90	3.15	3.90	6.40
DIAMETER OF PULLEY . . . . . INCHES	7	7	7	8	10	12	18	20	24	30
FACE OF PULLEY . . . . . INCHES	6	6	7	10	10	12	12	12	14	16
FLOOR SPACE . . . . . INCHES	25x29	27x30	27x32	30x39	30x45	38x48	45x56	52x68	64x72	77x102
BOTTOM OF PUMP TO COUPLING CENTER . FEET	3⅓	3⅓	3⅓	4	4⅔	4⅔	5⅓	5⅓	6	6⅓
SHAFTING USED . . . . . INCHES	1¼	1¼	1¼	1½	1⅝	1⅞	2¼	2¼	2 1/16	3¼
APPROXIMATE WEIGHT . . . . . POUNDS	190	210	225	360	600	700	1250	1900	2600	4800
*PRICE	60.00	70.00	75.00	110.00	140.00	170.00	265.00	330.00	420.00	600.00

*For pumps ordered with threaded suction pipe connection, one size larger than discharge, add 12½ per cent to price. Discharge Pipe should be one size larger than the pump.



K-520.

DEEP WELL STEAM PUMPING ENGINE.

K-520 illustrates our Standard Deep Well Steam Pumping Head for pumping deep wells for city, railroad, factory, and other uses.

It is fitted with our patented balanced piston steam valve, which operates easily and saves steam. These steam heads are simple in construction, low in first cost, and thoroughly reliable and durable. Sizes suitable have brass differential plunger made on forged steel plunger rod, and by means of which a part of the water is discharged on the down stroke, permitting, in many cases where water is to be elevated above ground, the use of a smaller size steam head, and the removal of a percentage of the load from pump rods and valves in the well. Steam piston is provided with two spring packing rings accurately fitted. Inlet steam ports have choke valve for regulating admission of steam to requirements of up and down strokes. Lower exhaust port has a choke valve to prevent too quick down stroke, by reason of weight of rods when top inlet choke is closed, but it should be used only in locations where inlet chokes are insufficient to give even regulation. Tee head screws to water discharge pipe in well, and side discharge may be to either side or end.

To releather plunger valve, clamp plunger rod, disconnect it from crosshead, swing pump head around on base from over well, remove well cover plate, and draw up rods.

FURNISHED:—Steam Head only, complete with Sight Feed Lubricator and Pipe Fittings shown.

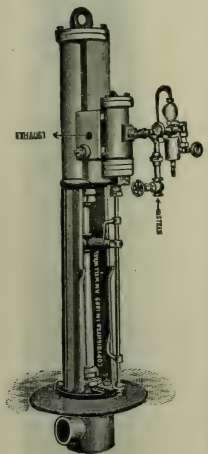
We cover steam cylinder barrel with sheet asbestos and steel jacket with brass bands at small advance.



DEEP WELL STEAM PUMPING ENGINE.—K-520.

NUMBER	4	5	6	7	8	10	12	13	14
DIAMETER STEAM CYLINDER . . . INCHES	5	6	6	8	8	10	12	14	16
STROKE STEAM CYLINDER . . . INCHES	24	24	36	24	36	36	36	36	36
SIZE WELL WATER PIPE . . . INCHES	4½	5	5	6	6	8	8	10	12
SIZE DISCHARGE PIPE . . . INCHES	3	3½	3½	4	4	6	6	7	8
SIZE STEAM SUPPLY . . . INCHES	¾	1	1	1¼	1¼	1½	2	2½	3
SIZE EXHAUST . . . INCHES	1	1¼	1¼	1½	1½	2	2½	3	3½
SIZE WOOD ROD COUPLING REQUIRED . . . INCHES	⅞	1⅛	1⅛	1⅛	1⅛	1½	1½	1½	2
APPROXIMATE WEIGHT . . . POUNDS	800	900	1000	1200	1500	1800	2400	2800	3500
PRICE . . . EACH	180.00	225.00	265.00	290.00	320.00	370.00	480.00	670.00	900.00

Cylinder shell is of smaller diameter than discharge pipe, to permit of easy removal of valves for repacking without taking up cylinder—5¼-inch and smaller plungers only have bottom bale.



K-525.

DEEP WELL STEAM PUMPING ENGINE.

K-525 shows our small Deep Well Steam Pumping Engine. It is similar to K-520. Steam valve is our patent balanced valve, which operates easily and economically. Choke valves in steam ports adjust inlet of steam to work required on up and down strokes. A like valve adjusts exhaust, preventing too quick down stroke, giving pump a steady motion. Tee head is provided with side discharge, from which water is piped to desired point. The engine can be removed from base and valves releathered without disturbing discharge pipe. This engine is used with deep well working barrels, as illustrated (showing an imaginary section). These small pumps are great favorites with creameries and manufacturing plants, where ordinary quantities of water are required. Where steam pressure often varies much during the day, it is well to purchase with pump a reducing valve so steam pressure to pump will be constant.

FURNISHED:—We furnish K-525 Steam Pumping Engine with ½-pint lubricator and steam connections as shown.

To make complete plant for a well, the following trimmings will be needed: Wood rods, water pipe, a working barrel, also an air chamber and discharge check valve, if water is to be forced.

HAND ATTACHMENT:—We can furnish connections and handle for putting on these pumps so they may be operated by hand when steam is down. List price, $13.00.

DEEP WELL STEAM PUMPING ENGINE.—K-525.

DIAMETER OF CYLINDER . . . . . INCHES	4	4	4	5
LENGTH OF STROKE . . . . . INCHES	8	12	16	16
FLOOR SPACE . . . . . SQUARE FEET	1¼	1½	1½	1½
HEIGHT . . . . . FEET	3½	4	4⅔	5
SIZE STEAM SUPPLY . . . . . INCHES	½	½	½	¾
SIZE EXHAUST . . . . . INCHES	¾	¾	¾	1
SIZE SUCTION . . . . . INCHES	2½	3	3	3*
SIZE DISCHARGE . . . . . INCHES	1½	2	2	2*
PRICE . . . . . EACH	70.00	90.00	110.00	140.00

For prices on Cylinders, see pages 335 and 336.

Cylinder shell is of smaller inside diameter than discharge pipe, to permit of easy removal of valves for repacking without taking up cylinder. *If water obtained in caving materials, have well completed with screen before putting in pump.* 5¾-inch and smaller plungers, only, have bottom bale.

*Can furnish 3½ or 4-inch suction if shipped from factory, and in that case discharges are 2½ and 3-inch respectively.

Bottom of pump piston rod has ½-inch pin pipe thread, on which is placed a ½x⅜-inch reducing coupling so either ⅜ or ½-inch malleable wood rod coupling will fit.

When using solid steel pump rods, to make connection, order at extra price:

1 Substitute, ⅜-inch pipe to ⅜-inch bolt thread, each, .60; 1 Substitute, ⅜-inch pipe to $\frac{7}{16}$-inch bolt thread, each, 60.

When using K-800 wrought wood rod couplings to make connections, order at extra price:

1 Substitute, ½-inch pipe to ⅜-inch pin, each, .80; 1 Substitute, ½-inch pipe to ⅞-inch pin, each, .90.

TUBULAR WELL CYLINDERS.



K-540.
ALL BRASS,
EUREKA.



K-542.
ALL BRASS,
EUREKA, WITH
BRONZE VALVES



K-544.
ALL BRASS,
EUREKA,
TAPER POINT



K-546.
WROUGHT IRON,
PLAIN OR GALVAN-
IZED, BORED AND
POLISHED, WITH
THREE-FOOT POINT.



K-548.
BRASS LINED,
WITH
THREE-FOOT POINT.

For prices on above see pages 335 and 336.

K-540. Can be set in place after well is made. Printed directions sent with each cylinder.

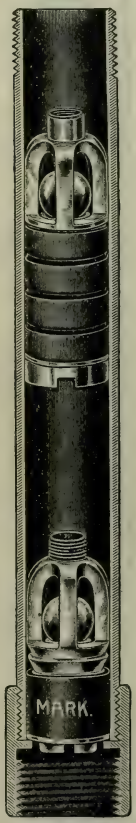
K-544. This cylinder is seated by crowding into turned coupling, which expands the rubber packer and makes tight joint and does not require a seating tool.

K-546. Four-leather plunger furnished at small additional cost.

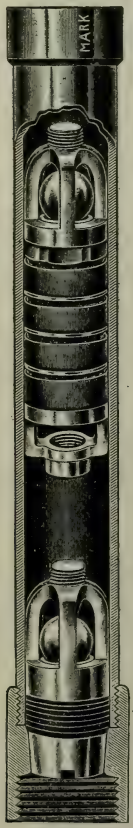
TUBULAR WELL CYLINDERS.



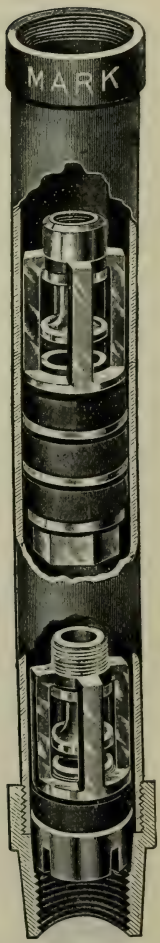
K-550.
STEEL CASED BRASS LINED ARTESIAN. FOR CASED OR OPEN WELLS.



K-552.
STEEL CASED BRASS LINED ARTESIAN, WITH BRONZE BALL VALVES. FOR CASED OR OPEN WELLS.



K-554.
ALL BRASS ARTESIAN, WITH BRONZE BALL VALVES. FOR CASED OR OPEN WELLS.



K-556.
ALL BRASS ARTESIAN, EXTRA HEAVY, WITH SPOOL VALVES.

For prices on above see pages 335 and 336.

In addition to the above Artesian Cylinders, we make one of heavy brass tubing with hard bronze valves, to be used in cased wells when a larger diameter cylinder is needed than Figure K-554. Price on application.

WORKING BARRELS AND IRRIGATING CYLINDERS.



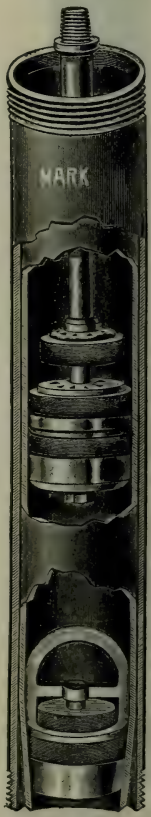
K-560.
WORKING BARREL, ALL BRASS.



K-562.
WORKING BARREL, BRASS LINED.



K-564.
WORKING BARREL, ALL BRASS.



K-566.
IRRIGATING CYLINDER, BRASS LINED.

For prices on the above see pages 335 and 336.

K-560. We make also in Brass Lined. See prices on page 336.

K-566. We can furnish this style also in plain brass, to be used in pipe after well is made Gum Packers with brass attachments for seating barrels listed on page 340.

TUBULAR WELL CYLINDERS. (Illustrated on pages 332 to 334.)

ALL BRASS TUBULAR WELL CYLINDERS.—K-540.

SIZE OF WELL . . . . . INCHES	2	2	2½	2½	3	3	3½	3½	4	4
INSIDE DIAMETER . . . . . INCHES	1 13/16	1 13/16	2½	2½	2¾	2¾	3	3	3½	3½
STROKE . . . . . INCHES	12	16	12	16	12	16	12	16	16	24
COMPLETE . . . . . EACH	6.40	7.60	11.00	12.50	15.00	17.00	30.00	33.00	36.00	42.00

ALL BRASS CYLINDERS WITH BRONZE VALVES.—K-542.

SIZE OF WELL . . . . . INCHES	2	2	2½	2½	3	3	3½	3½	3½	4	4
INSIDE DIAMETER OF CYLINDER . INCHES	1 13/16	1 13/16	2½	2½	2¾	2¾	3	3	3	3½	3½
STROKE . . . . . INCHES	10	16	10	16	10	16	12	16	24	12	16
COMPLETE . . . . . EACH	4.50	5.00	9.00	10.50	12.50	13.50	23.00	24.50	26.00	31.00	32.50

SIZE OF WELL . . . . . INCHES	4	4½	4½	5	5	6	6	7	7	8	8
INSIDE DIAMETER OF CYLINDER . INCHES	3½	4	4	4½	4½	5½	5½	6½	6½	7 7/16	7 7/16
STROKE . . . . . INCHES	24	16	24	24	36	24	36	24	36	24	36
COMPLETE . . . . . EACH	35.50	41.00	45.00	60.00	70.00	90.00	104.00	120.00	136.00	240.00	260.00

TAPER POINT TUBULAR WELL CYLINDERS.—K-544.

SIZE OF WELL . . . . . INCHES	2	2	2½	2½	3	3	3½	3½	4	4
INSIDE DIAMETER . . . . . INCHES	1 13/16	1 13/16	2½	2½	2¾	2¾	3	3	3½	3½
STROKE . . . . . INCHES	12	16	12	16	12	16	12	16	12	16
BASE TAPPED FOR PIPE . . . . . INCHES	¾	¾	1	1	1½	1½	1½	1½	2	2
COMPLETE . . . . . EACH	6.40	7.60	11.00	12.50	15.00	17.00	30.00	33.00	36.00	42.00

WROUGHT IRON TUBULAR WELL CYLINDERS.—K-546.

DIAMETER OF CYLINDER . . . . . INCHES	2	2	2	2½	2½	3	3	4	4
LENGTH OF CYLINDER . . . . . INCHES	24	36	48	36	48	36	48	36	48
PAINTED . . . . . EACH	7.65	8.50	9.50	16.50	18.50	22.50	25.00	41.00	45.00
GALVANIZED . . . . . EACH	8.10	9.00	10.00	17.00	19.00	23.50	26.00	43.00	48.00

GALVANIZED BRASS LINED TUBULAR WELL CYLINDERS.—K-548.

DIAMETER OF CYLINDER . . . . . INCHES	2	2	2	2½	2½	2½	3	3	3	4	4
LENGTH OF CYLINDER . . . . . INCHES	24	36	48	24	36	48	24	36	48	36	48
WITH 3-FT. REGULAR WELL POINT . EACH	12.00	14.00	15.50	18.00	20.00	24.00	23.25	26.00	30.25	45.50	50.50
WITH 3-FT. PERFECTION WELL POINT EACH	13.50	15.20	16.90	19.35	21.70	25.20	27.50	30.50	34.50	50.00	55.00

BRASS LINED ARTESIAN WELL CYLINDERS.—K-550 and K-552.

DIAMETER OF CYLINDER . . . . . INCHES	2	2	2½	2½	3	3	4	4
STROKE . . . . . INCHES	16	24	16	24	16	24	16	24
TOP AND BOTTOM CONNECTING PIPE . . . . . INCHES	2	2	2½	2½	3	3	4	4
LENGTH OF CYLINDER . . . . . INCHES	26	34	26	34	26	34	28	36
EXTREME OUTSIDE DIAMETER . . . . . INCHES	2⅞	2⅞	3⅜	3⅜	4⅛	4⅛	5⅛	5⅛
PLUNGER FITTED FOR PIPE . . . . . INCHES	⅜	⅜	⅜	⅜	½	½	¾	¾
K-550 . . . . . EACH	5.70	6.65	9.30	10.50	11.80	13.60	20.00	22.00
K-552 . . . . . EACH	6.60	7.60	10.80	12.00	14.30	16.50	31.00	33.00

K-552 3-inch Cylinders are 2 inches, and 4-inch Cylinders are 6 inches longer than K-550.

ALL BRASS ARTESIAN WELL CYLINDERS.—K-554.

INSIDE DIAMETER . . INCHES	1⅜	1⅜	1¾	1¾	1¾	2¼	2¼	2¼	2¼	2¾	2¾	2¾	2¾	2¾	3¼	3¼
STROKE . . . . . INCHES	16	24	10	16	24	10	16	24	36	10	16	24	30	36	10	16
CAPACITY PER STROKE, GALLS.	.10	.154	.10	.16	.25	.172	.275	.41	.61	257	.411	.61	.77	.92	.36	.57
LENGTH PUMP BARREL, INCHES	36	44	27	33	41	29	35	43	55	31	37	45	51	57	35	41
OUTSIDE DIAM. OF CAPS . IN.	2 3/16	2 3/16	2 1/16	2 1/16	2 1/16	3 9/16	3 9/16	3 9/16	3 9/16	3⅞	3⅞	3⅞	3⅞	3⅞	4 7/16	4 7/16
TOP AND BOTTOM PIPES . IN.	1½	1½	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½
SQUARE OF WOOD SUCKER ROD . . . . . INCHES	1⅛	1⅛	1⅛	1⅛	1⅛	1¼	1¼	1¼	1¼	1½	1½	1½	1½	1½	2	2
EACH	15.00	16.50	17.50	19.00	21.00	26.00	28.00	30.00	34.00	34.00	36.00	38.00	40.00	42.00	45.00	48.00

Prices on application for sizes from 3¼ inches by 24-inch stroke to 11½ inches by 36-inch stroke.

TUBULAR WELL CYLINDERS—(Concl.)—See Pages 332 to 334—K-556.
ALL BRASS ARTESIAN WELL CYLINDERS WITH SPOOL VALVES.

INSIDE DIAMETER CYLINDER . INCHES	1⅞	1⅞	1⅞	2¼	2¼	2¼	2¼	2¾	2¾	2¾	2¾	3¼	3¼	3½	3½
STROKE . . . . . INCHES	12	16	24	12	16	24	36	12	16	24	36	12	16	24	36
LENGTH, WITH ATTACHMENTS . INCHES	26	30	38	28¾	32¾	40¾	54¾	31	35	43	55	31¼	35½	43½	55½
CAPACITY, PER STROKE . . GALLONS	.12	.16	.25	.2	.275	.41	.61	.3	411	.61	.92	.43	.57	.86	1.29
OUTSIDE DIAM OF ATTACHMENTS . IN.	2 1/16	2 1/16	2 1/16	3 3/16	3 3/16	3 3/16	3 3/16	3½	3½	3½	3½	4 7/16	4 7/16	4 7/16	4 7/16
SIZE OF TOP AND BOTTOM PIPES . . IN.	2	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
PRICE . . . . . EACH	17.00	18.00	21.00	30.00	32.00	35.00	40.00	38.00	40.00	44.00	50.00	52.00	55.00	60.00	68.00

BRASS LINED WORKING BARRELS.—Page 334.
FITTED WITH THREE-LEATHER PLUNGER AND SPOOL POPPET VALVES.

SIZE OF WELL . . IN.	2	2	2	2	2½	2½	2½	3	3	3	3½	3½	3½	4	4	4
INSIDE DIAM. CYL. . IN.	1⅞	1⅞	1⅞	1⅞	2¼	2¼	2¼	2¾	2¾	2¾	3¼	3¼	3¼	3¾	3¾	3¾
STROKE . . . . IN.	10	14	24	36	10	14	24	10	14	24	10	14	24	10	14	24
LENGTH OF BARREL. IN.	20	24	34	46	23	27	37	25	29	39	26	30	40	29	33	43
COMPLETE. . . EACH	7.00	7.50	9.00	11.00	12.00	12.50	14.50	16.00	17.50	19.50	22.50	23.50	26.00	30.50	32.00	35.00

36-inch Stroke made also for 2½, 3, 3½ and 4-inch Wells.

ALL BRASS WORKING BARRELS—Page 334.
FITTED WITH THREE-LEATHER PLUNGER AND SPOOL POPPET VALVES.

SIZE OF WELL . . IN.	2	2	2	2	2½	2½	2½	3	3	3	3½	3½	3½	4	4	4
INSIDE DIAM. CYL. . IN.	1 1/16	1 1/16	1 1/16	1 1/16	2¼	2¼	2¼	2¾	2¾	2¾	3	3	3	3½	3½	3½
STROKE . . . . IN.	10	14	24	36	10	14	24	10	14	24	10	14	24	10	14	24
LENGTH OF BARREL. IN.	21	25	35	47	23	27	37	25	29	39	26	30	40	29	33	43
COMPLETE. . . EACH	6.00	6.50	8.00	9.50	10.50	11.00	12.00	13.00	14.00	15.50	19.50	20.50	24.00	25.00	26.50	29.00

36-in. Stroke made also for 2½, 3, 3½ and 4-in. Wells. For prices of Gum Packers with Brass Attachments for seating Working Barrels, see p. 340.

BRASS LINED WORKING BARRELS.—Page 334.
FITTED WITH FOUR-LEATHER PLUNGER AND BRONZE BALL VALVES.

SIZE OF WELL . . IN.	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
INSIDE DIAM. CYL. . IN.	1 1/16	1 1/16	1 1/16	1 1/16	2¼	2¼	2¼	2¼	2¾	2¾	2¾	2¾	3¼	3¼	3¼	3¼
STROKE . . . . IN.	10	14	24	36	10	14	24	36	10	14	24	36	10	14	24	36
LENGTH OF BARREL. IN.	23	27	37	49	24	28	38	50	26	30	40	52	28	32	42	54
COMPLETE. . . EACH	11.50	12.00	13.50	15.50	15.50	16.50	18.00	19.50	21.50	22.50	24.50	27.00	31.50	32.50	35.00	38.00
SIZE OF WELL . . IN.	4	4	4	4	4½	4½	4½	4½	5	5	6	6	7	7	8	8
INSIDE DIAM. CYL. . IN.	3¾	3¾	3¾	3¾	4¼	4¼	4¼	4¼	4¾	4¾	5¾	5¾	6¾	6¾	7 7/16	7 7/16
STROKE . . . . IN.	10	14	24	36	10	14	24	36	24	36	24	36	24	36	24	36
LENGTH OF BARREL. IN.	28	32	42	54	34	38	48	60	48	60	52	64	56	68	58	70
COMPLETE. . . EACH	44.50	46.00	49.00	52.50	54.50	56.00	61.50	65.50	78.00	86.00	112.00	124.00	152.00	166.00	236.00	250.00

For prices on Gum Packers with Brass Attachments for seating Barrels, see page 340.

ALL BRASS WORKING BARRELS.—Page 334.
FITTED WITH FOUR-LEATHER PLUNGER AND BRONZE BALL VALVES.

SIZE OF WELL . . IN.	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
INSIDE DIAM. CYL. . IN.	1 1/16	1 1/16	1 1/16	1 1/16	2¼	2¼	2¼	2¼	2¾	2¾	2¾	2¾	3	3	3	3
STROKE . . . . IN.	10	14	24	36	10	14	24	36	10	14	24	36	10	14	24	36
LENGTH OF BARREL. IN.	23	27	37	49	24	28	38	50	26	30	40	52	28	32	42	54
COMPLETE. . . EACH	10.50	11.00	12.50	14.00	14.00	14.50	15.50	17.00	18.50	19.50	21.00	23.00	29.00	30.00	33.00	37.00
SIZE OF WELL . . IN.	4	4	4	4	4½	4½	4½	4½	5	5	6	6	7	7	8	8
INSIDE DIAM. CYL. . IN.	3½	3½	3½	3½	4	4	4	4	4½	4½	5½	5½	6½	6½	7 7/16	7 7/16
STROKE . . . . IN.	10	14	24	36	10	14	24	36	24	36	24	36	24	36	24	36
LENGTH OF BARREL. IN.	28	32	42	54	34	38	48	60	48	60	52	64	56	68	58	70
COMPLETE. . . EACH	39.00	40.50	43.00	45.50	48.00	49.50	51.50	54.50	70.50	74.50	92.00	100.00	136.00	146.00	212.00	222.00

IRRIGATING BRASS LINED CYLINDERS.—K-566.

SIZE OF WELL . . IN.	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
INSIDE DIAM. CYL. . IN.	1⅞	1⅞	1⅞	1⅞	2¼	2¼	2¼	2¼	2¾	2¾	2¾	2¾	3¼	3¼	3¼	3¼
STROKE . . . . IN.	10	14	24	36	10	14	24	36	10	14	24	36	10	14	24	36
LENGTH OF BARREL. IN.	21	26	42	54	21	26	42	54	21	26	42	54	21	26	42	54
COMPLETE. . . EACH	7.00	8.00	10.50	12.00	11.00	12.00	14.50	16.00	16.00	17.50	21.00	23.50	19.50	21.00	25.00	28.00

Larger sizes to 8-inch, prices upon application.



K-575. IRON.



K-577. IRON.



K-579. IRON



K-581. ALL BRASS.



K-585. CHECK VALVE FOR OUTSIDE CAP.



K-587. CHECK VALVE FOR INSIDE CAP.

*WINDMILL STUFFING BOX HEADS WITH BRASS CASED ROD.

STYLE	K-575	K-577	K-579	K-581
STROKE . . . . . INCHES	10	10	10	10
PRICE . . . . . EACH	6.00	6.00	3.00	4.00

*These are all fitted for 1 and 1¼, 1½ and 2-inch pipe.

WESTERN STYLE CHECK VALVES.—K-585 and K-587.

SIZE CYLINDERS . . . . . INCHES	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	6	8
EACH	.40	.40	.40	.40	.50	.50	.50	.50	.80	1.20	1.50	2.50

These valves are made with cage and brass poppet, with rubber facing; they are quick closing, more efficient and durable than the leather hinge valve. They are specially desirable in large size cylinders on account of their quick closing and permitting of larger opening through cap than with the ordinary valve.



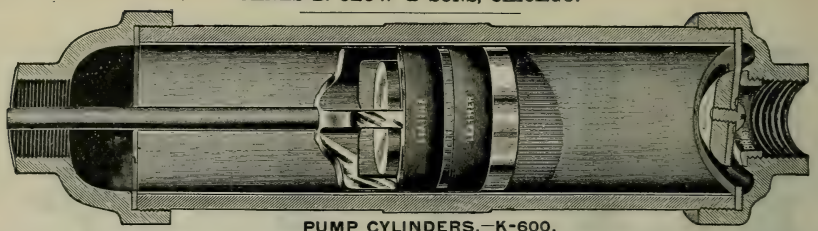
K-594. WINDMILL REGULATOR.
Each, . . . 5.00.



I X L CUSHION SPRING.—K-590.

SIZE OF WINDMILLS . . . . FEET	10	12	R. R. Mill 12	R. R. Mill 16 to 18	R. R. Mill 20 to 22	R. R. Mill 25–28–30
EACH	3.00	4.00	6.00	7.00	8.00	9.00

K-594. This Windmill Regulator is a device for maintaining a uniform supply of water in the tank. It pulls the mill out of gear before tank overflows and also allows it to go into gear when water is lowered in the tank. This is the only Regulator working a straight ratchet; a very important matter, as it does not jerk the mill when throwing it out of gear.



PUMP CYLINDERS.—K-600.

SIZE . . . . . INCHES	2x10	2½x10	2½x10	2¾x10	3x10	3½x10	3½x10	4x10	4½x10	5x10	6x10
ALL IRON . . . . . EACH	3.75	4.00	4.35	4.70	5.00	6.00	7.00	9.00	12.50	16.50	24.00
IRON, BRASS CAGE AND VALVE . . . . . EACH	4.50	4.75	5.35	5.70	6.25	7.50	8.75	11.50	15.75	20.50	29.00
BR. BODY AND BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PLUNGER . . . . . EACH	7.50	7.75	8.00	8.50	9.00	9.75	10.50	13.00	20.00	26.50	40.00
BRASS BODY AND BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	8.00	8.25	8.50	9.00	9.75	10.50	11.50	15.50	22.50	30.00	45.00
ALL BRASS . . . . . EACH	10.75	11.00	12.25	12.75	13.50	14.75	16.75	21.50	30.00	40.00	60.00

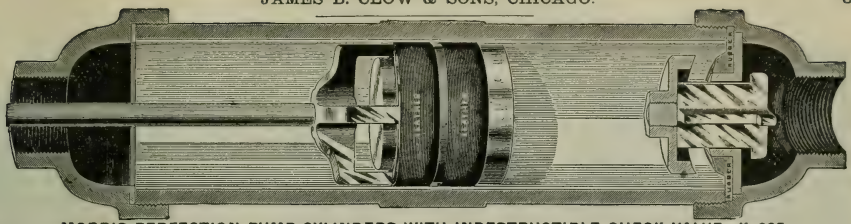
SIZE . . . . . INCHES	2x12	2½x12	2½x12	2¾x12	3x12	3½x12	3½x12	4x12	4½x12	5x12	6x12
ALL IRON . . . . . EACH	5.50	5.75	6.00	6.50	7.00	8.00	9.00	11.50	15.00	20.00	28.50
IRON, BRASS CAGE AND VALVE . . . . . EACH	6.25	6.50	7.00	7.50	8.25	9.50	10.75	14.00	18.25	24.00	33 50
BR. BODY AND BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PLUNGER . . . . . EACH	8.00	8.25	8.50	9.00	9.50	10.25	11.25	14.25	22.00	30.00	45.00
BRASS BODY AND BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	9.25	9.50	9.75	10.50	11.00	12.00	13.75	18.00	26.00	35.00	50.00
ALL BRASS . . . . . EACH	11.25	11.50	12.75	13.25	14.00	15.25	17.50	22.50	34.00	46.00	65.00

SIZE . . . . . INCHES	2x14	2½x14	2½x14	2¾x14	3x14	3½x14	3½x14	4x14	4½x14	5x14	6x14
ALL IRON . . . . . EACH	6.00	6.25	6.50	7.00	7.50	8.75	10 00	13.00	17.50	22.50	33.50
IRON, BRASS CAGE AND VALVE . . . . . EACH	6.75	7.00	7.50	8.00	8.75	10.25	11.75	15.50	20.75	26.50	38.50
BR. BODY AND BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PLUNGER . . . . . EACH	8.50	9.00	9.25	9.75	10.25	11.00	12.25	15.75	25.00	33.00	50.00
BRASS BODY AND BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	9.75	10.25	10.50	11.25	11.75	12.75	14.75	19.00	28.00	38.00	56.00
ALL BRASS . . . . . EACH	13.00	13.50	14.75	15.50	16.25	17.75	21.00	26.50	36.00	50.00	70.00

SIZE . . . . . INCHES	2x16	2½x16	2½x16	2¾x16	3x16	3½x16	3½x16	4x16	4½x16	5x16	6x16	8x16
ALL IRON . . . . . EACH	6.00	6.50	7.00	7.50	8.00	9.75	11.25	14.50	18.50	25.00	37.50	75.00
IRON, BRASS CAGE AND VALVE . . EACH	6.75	7.25	8.00	8.50	9.25	11.25	13.00	17.00	21.75	29.00	42.50	85.00
BR. BODY AND BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R EACH	9.00	9.75	10.25	10.75	11.25	12.00	13.50	17.50	25.00	35.00	55.00	100.00
BRASS BODY AND BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . EACH	10.50	11.25	11.75	12.25	12.75	14.00	16.00	20.50	30.50	42.00	62.00	124.00
ALL BRASS . . . . . EACH	13.75	14.50	16.00	16.50	17.25	19.00	22.25	28.00	38.75	53.50	75.00	150.00

SIZE . . . . . INCHES	2x18	2½x18	2½x18	2¾x18	3x18	3½x18	3½x18	4x18	4½x18	5x18	6x18	8x18
ALL IRON . . . . . EACH	6.75	7.00	7.50	8.00	8.50	10.75	12.50	16.00	22.50	30.00	42.50	90.00
IRON, BRASS CAGE AND VALVE . . EACH	7.50	7.75	8.50	9.00	9.75	12.25	14.25	18.50	25.75	34.00	47.50	100.00
BR. BODY AND BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R EACH	9.50	10.50	11.25	11.75	12.25	13.00	14.75	19.25	30.00	40.00	60.00	115.00
BRASS BODY AND BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . EACH	11.00	12.00	12.75	13.25	13.75	15.00	17.25	22.25	35.00	47.00	67.00	134.00
ALL BRASS . . . . . EACH	14.25	15.25	17.00	17.50	18.25	20.00	23.50	29.75	43.25	58.50	80.00	160.00

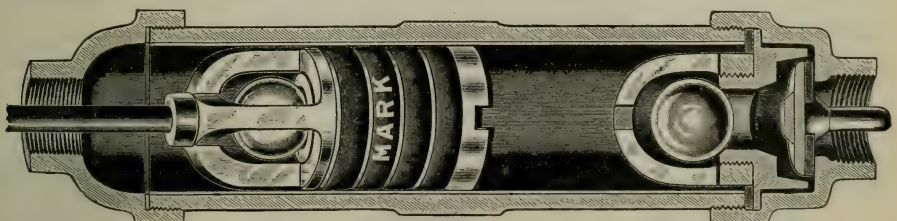
SIZE . . . . . INCHES	2x20	2½x20	2½x20	2¾x20	3x20	3½x20	3½x20	4x20	4½x20	5x20	6x20	8x20
ALL IRON . . . . . EACH	7.50	8.00	8.50	9.00	9.50	11.50	13.50	17.00	25.00	34.00	50.00	100.00
IRON, BRASS CAGE AND VALVE . . EACH	8.25	8.75	9.50	10.00	10.75	13.00	15.25	19.50	28.25	38.00	55.00	110 00
BR. BODY AND BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R EACH	10.00	11.25	12.25	12.75	13.25	14.00	16.25	21.00	34.00	45.00	65.00	125.00
BRASS BODY AND BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . EACH	11.50	12.75	13.50	14.25	14.75	16.00	19.00	24.00	39.50	52.00	72.00	144.00
ALL BRASS . . . . . EACH	14.75	16.00	17.75	18.50	19.25	21.00	25.25	31.50	47.75	63.50	85.00	170.00



MORRIS PERFECTION PUMP CYLINDERS WITH INDESTRUCTIBLE CHECK VALVE.—K-605.
FITTED WITH TWO LEATHER BRASS PLUNGERS, BRASS CAGE AND POPPET AND BRASS OR IRON FOLLOWER PLUNGER.

SIZE . . . . . INCHES	2x12	2¼x12	2½x12	2¾x12	3x12	3¼x12	3½x12	4x12
BR. BODY, BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R . . EACH	8.00	8.25	8.50	9.00	9.50	10.25	11.25	14.25
BRASS BODY, BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	9.25	9.50	9.75	10.50	11.00	12.00	13.75	18.00
ALL BRASS . . . . . EACH	11.25	11.50	12.75	13.25	14.00	15.25	17.50	22.20
SIZE . . . . . INCHES	2x14	2¼x14	2½x14	2¾x14	3x14	3¼x14	3½x14	4x14
BR. BODY, BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R . . EACH	8.50	9.00	9.25	9.75	10.25	11.00	12.25	15.75
BRASS BODY, BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	9.75	10.25	10.50	11.25	11.75	12.75	14.75	19.00
ALL BRASS . . . . . EACH	13.00	13.50	14.75	15.50	16.25	17.75	21.00	26.50
SIZE . . . . . INCHES	2x16	2¼x16	2½x16	2¾x16	3x16	3¼x16	3½x16	4x16
BR. BODY, BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R . . EACH	9.00	9.75	10.25	10.75	11.25	12.00	13.50	17.50
BRASS BODY, BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	10.50	11.25	11.75	12.25	12.75	14.00	16.00	20.50
ALL BRASS . . . . . EACH	13.75	14.50	16.00	16.50	17.25	19.00	22.25	28.00
SIZE . . . . . INCHES	2x18	2¼x18	2½x18	2¾x18	3x18	3¼x18	3½x18	4x18
BR. BODY. BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R . . EACH	9.50	10.50	11.25	11.75	12.25	13.00	14.75	19.25
BRASS BODY, BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	11.00	12.00	12.75	13.25	13.75	15.00	17.25	22.25
ALL BRASS . . . . . EACH	14.25	15.25	17.00	17.50	18.25	20.00	23.50	29.75
SIZE . . . . . INCHES	2x20	2¼x20	2½x20	2¾x20	3x20	3¼x20	3½x20	4x20
BR. BODY, BR. LINED, I. CAPS, BR. CAGE AND VALVE, I. FOL. PL'NG'R . . EACH	10.00	11.25	12.25	12.75	13.25	14.00	16.25	21.00
BRASS BODY, BRASS LINED, IRON CAPS, ALL BRASS PLUNGER . . . . . EACH	11.50	12.75	13.50	14.25	14.75	16.00	19.00	24.00
ALL BRASS . . . . . EACH	14.75	16.00	17.75	18.50	19.25	21.00	25.25	31.50

In the Perfection Cylinders a Rubber Valve Seat is placed below the direct action of the water. It passes through the brass waterway, and projects slightly above the valve seat, thereby protecting the seat from the friction of the water in its passage into the cylinder. As shown in illustration, the brass poppet is in the form of an inverted cup with beveled edge, which drops on a thick rubber valve seat, and as this action is one of compression with little or no friction, it renders our check valve practically indestructible.



DEEP WELL BRONZE BALL VALVE PUMP CYLINDERS (OUTSIDE CAPS ONLY).—K-610

SIZE . . . . . INCHES	2x16	2¼x16	2½x16	2¾x18	3x18	2x18	2¼x18	2½x18	2¾x20	3x20	2x20	2¼x20	2½x20
PIPE SIZE . . . . . INCHES	1¼	1¼	1¼	1¼	1¼	1¼	1¼	1¼	1¼	1¼	1¼	1¼	1¼
STROKE . . . . . INCHES	8	8	8	8	8	10	10	10	10	10	12	12	12
IRON . . . . . EACH	7.50	8.25	9.25	11.75	15.75	8.00	8.75	9.75	12.25	16.25	8.50	9.25	10.25
BRASS LINED . . . . EACH	10.00	11.00	12.00	15.00	19.50	11.00	12.00	13.00	16.50	22.00	12.00	13.00	14.00

We recommend these Cylinders for extremely deep wells. They are made of best material and heavy throughout. They have four leather bronze ball plungers and double check valves, one a bronze ball, the other a flat poppet, making leakage impossible



K-615.
WELL
PACKER.

WELL CYLINDER PACKINGS.

K-615 represents a well packer for making tight joint between strainer and well casing; it is also used as support for cylinders. To locate strainer in well, screw well packer on upper end of same, attach seating tool to drill rod and insert into key seat in well packer; lower all in well to place where strainer is to be located, turn drill rod to the right, which forces taper wedge into rubber ring, expanding same and making tight joint. To remove strainer from well, lower seating tool to key seat in well packer, turn to left, partly unscrewing taper wedge from coupling, which contracts rubber packer and permits strainer to be withdrawn.

WELL PACKERS.—K-615.

DIAMETER OF WELL . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
THREADED FOR PIPE . . INCHES	1¼	1½	2	2	2½	3	3½	4	5	6
PRICE . . . . . EACH	1.50	2.00	2.70	4.50	6.00	7.50	10.00	14.00	20.00	30.00

SEATING TOOLS.—K-620.

SIZE OF CYLINDER . . . . INCHES	2	2½	3	4	5	6	7	8
PRICE . . . . . EACH	.60	.90	1.20	2.40	6.00	8.00	10.00	12.00



K-620.
SEATING
TOOL.



K-623. GUM PACKER.

GUM PACKERS, WITH BRASS ATTACHED.—K-623.
FOR SEATING WORKING BARRELS.

DIAMETER OF WELL CASING. INCHES	2	2½	3	3½	4	4½	5	6	7	8
PRICE . . . . . EACH	1.15	1.60	2.10	2.95	3.40	4.75	5.25	6.15	8.70	11.40



K-625.
RUBBER
PACKER.

RUBBER PACKERS.—K-625.
FOR TUBULAR WELL VALVES.

SIZE OF VALVES INCHES	2	2½	3	3½	4	5	6
PRICE . . . . . EACH	.16	.30	.40	.60	.80	3.00	4.00



K-627.

BRONZE AND RUBBER BALLS.—K-627.

DIAMETER OF BALL . . . . . INCHES	⅜	½	11/16	¾	⅞	1 1/16	1¼	1⅓	1⅜	1½	1⅝	2	2⅛
BRONZE . . . . . EACH	.30	.30	.30	.35	.35	.45	.50	.70	.90	1.10	1.40	2.15	2.75
HARD RUBBER . . . . . EACH	-----	-----	-----	-----	-----	-----	.10	.25	-----	.40	.50	-----	-----

DIAMETER OF BALL . . . . . INCHES	2⅛	2¾	3	3¼	4	4½	4¾	4¾	5¼	5½	6	6⅝	7⅝
BRONZE . . . . . EACH	3.75	4.25	4.75	5.50	6.75	7.75	10.00	11.00	12.50	13.50	15.00	17.50	25.00

WELL SEALS—K-630.



K-630.
WELL SEAL.

DIAMETER OF WELL . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8
TAPPED FOR PIPE . . . . INCHES	1¼	1½	2	2½	2½	3	3½	4	5	6
PRICE . . . . . EACH	2.00	3.00	4.00	6.00	8.00	12.00	16.00	20.00	30.00	40.00

Makes tight joint between different sizes of pipe in wells. To make the joint, force taper of seal into the coupling or pipe, which will expand the rubber packer and make a sure joint.

TUBULAR WELL VALVES.



K-640.
ALL BRASS.
SPOOL POPPET.
TWO-LEATHER
PLUNGER.



K-642.
ALL BRASS.
SPOOL POPPET.
FOUR-LEATHER
PLUNGER.



K-644.
ALL BRASS.
SPOOL CHECK.



K-646.
ALL BRASS.
BRONZE BALL.
TWO-LEATHER
PLUNGER.



K-648.
ALL BRASS.
BRONZE BALL.
FOUR-LEATHER
PLUNGER.



K-650.
ALL BRASS.
BRONZE BALL.
CHECK.

SIZE . . . . . INCHES	2	2	2½	2½	3	3	4	4
NUMBER OF LEATHERS	2	4	2	4	2	4	2	4
CHECK AND PLUNGER . . . . . PER SET	4.00	5.00	9.00	10.00	12.00	14.00	32.00	36.00

These Valves are made extra heavy and long rings between the leather packings. This style of poppet permits full flow of water through valve openings with the least friction, as no projection extends in the valve to interfere with the flow.



K-655. VALVE LEATHER. K-657. PLUNGER LEATHER.

PUMP LEATHERS.



K-660. PLUNGER LEATHER, CRIMPED.

VALVE AND PLUNGER LEATHERS.—K-655 and K-657.

SIZES (DIAM. OF CYLINDER). INCHES	1¾	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	6
VALVE LEATHERS . . . . . EACH	.10	.10	.11	.12	.13	.15	.17	.19	.24	.38	.45	.60
PLUNGER LEATHERS, FLAT . EACH	.08	.08	.09	.10	.11	.13	.14	.16	.17	.20	.30	.40
PLUNGER LEATHERS, CRIMPED EACH	.15	.15	.17	.20	.22	.25	.28	.32	.35	.42	.70	1.00

CRIMPED PLUNGER LEATHERS FOR ARTESIAN WELL CYLINDERS.—K-660.

SIZES (DIAM. CYL.) . . INS.	1⅜	1¾	2¼	2¾	3¼	3¾	4¼	4¾	5¼	5¾	6¼	6¾	7¾	8½	9½
PLUNGER LEATHERS . EACH	.20	.25	.30	.35	.45	.60	.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	4.00



K-665.
WATER CONDUCTOR.
Tapped for 1¼ or 1½ pipe.
Each, . 1.00.



K-668. GOOSE NECK.

Size, inches .	¾	1	1¼	1½
Each . . .	.60	.60	.80	.90
If with Hose Coupling, each,	.90	1.25	1.50	1.80



K-670.
MALLEABLE CLEVIS.

Size, inches,	¾	1
Each, . .	50	50

TUBULAR WELL VALVES.



K-675. PLUNGER.



K-677. BALL PLUNGER.



K-679. PERFECTION PLUNGER.



K-681. FOUR-LEATHER PLUNGER.



K-683. FOUR-LEATHER BALL PLUNGER.



K-685. CHECK.


K-687. PERFECTION CHECK.



K-689. BALL CHECK.



K-691. BALE TOP CHECK.



K-693. BALE TOP BALL CHECK.

PLUNGER AND CHECK VALVES.

SIZE . . . . . INCHES	2	2	2½	2½	3	3	4	4	5	5	6	6
NUMBER OF LEATHERS	2	4	2	4	2	4	2	4	2	4	2	4
PLUNGER AND CHECK . . PER SET	2.40	3.20	6.00	7.00	8.00	10.00	16.00	18.00	40.00	44.00	50.00	60.00


K-698. BREMER CHECK WITH SPRING DOG.

PLUNGER AND CHECK VALVES.


K-702. BREMER CHECK.


K-704. BREMER PLUNGER.

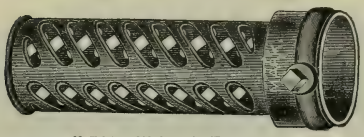

K-706. MARCY PLUNGER.


K-708. MARCY CHECK.


K-710. MARCY CHECK WITH SPRING DOG.

PLUNGER AND CHECK VALVES.

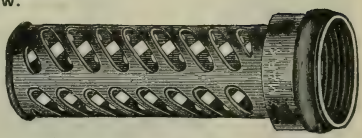
SIZE . . . . . INCHES	2	2½	3
K-708, K-706. CHECK AND PLUNGER . PER SET	3.20	8.40	12.80
K-706, K-710. CHECK AND PLUNGER . PER SET	4.20	10.20	15.40
K-702, K-704. CHECK AND PLUNGER . PER SET	2.40	-----	-----
K-704, K-698. CHECK AND PLUNGER . PER SET	3.20	-----	-----



K-720. WITH SET SCREW.



*K-722. WITH OUTSIDE THREAD.

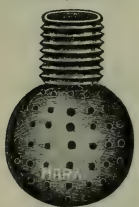


*K-724. WITH INSIDE THREAD.

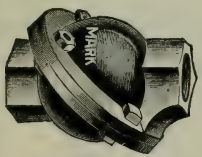
SUCTION PIPE STRAINERS FOR OPEN WELLS AND CISTERNS.—K-720, K-722 and K-724.

PIPE SIZE . . . . . INCHES	¾	1	1¼	1½	2
GALVANIZED, WITH BRASS GAUZE . . . . . EACH	.28	.28	.32	.36	.50
GALVANIZED, WITHOUT BRASS GAUZE . . . . . EACH	.22	.22	.24	.26	.40
PLAIN, WITHOUT BRASS GAUZE . . . . . EACH	.18	.18	.20	.24	.36

*K-722 and K-724 do not come in ¾-inch. These Suction Pipe Strainers are made of Malleable Iron, galvanized outside and in, will not break, and are a great improvement over the cast-iron ones in use. They are covered with a good quality of brass wire cloth, and are non-corrosive.



K-730. GLOBE STRAINER.



K-732. HOR. IRON CHECK VALVE.



K-734. IRON CHECK VALVE.



K-736. IRON FOOT VALVE.

GLOBE STRAINERS FOR HOSE.—K-730.

SIZE . . . . . INCHES	1¼	1½	2
PLAIN . . . . . EACH	.50	.65	1.00
GALVANIZED . . . . . EACH	.60	.75	1.25
BRASS . . . . . EACH	2.75	2.75	3.50

HORIZONTAL IRON CHECK VALVES.—K-732.

PIPE SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4
PLAIN . . . . . EACH	1.00	1.25	1.50	2.00	2.75	6.00	7.50	10.00	12.00
GALVANIZED . . . . . EACH	1.50	1.75	2.25	3.00	4.00	9.50	12.00	15.00	17.50

VERTICAL IRON CHECK VALVES.—K-734.

PIPE SIZE. . . . . INCHES	¾	1	1¼	1½	2	2½	3
PLAIN . . . . . EACH	1.50	1.75	2.00	2.50	3.00	4.25	6.00
GALVANIZED . . . . . EACH	2.00	2.25	2.75	3.50	4.50	6.00	10.00

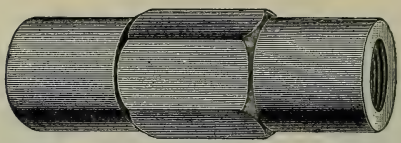
†IRON FOOT VALVES WITH STRAINERS.—K-736.

SIZE . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	10	12
PAINTED . . . EACH	.42	.44	.52	.65	90	1.30	1.85	2.60	2.80	4.00	4.25	7.00	16.00	20.00	29.00	58.00
GALVANIZED . EACH	.60	.60	.75	1.00	1.45	2.00	2.70	3.90	4.25	5.25	6.50	10.00	30.00	50.00	70.00	90.00

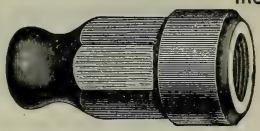
†The total area of openings in all strainers is far in excess of capacity of pipes of the various sizes.



*K-747. BEADED COUPLING.



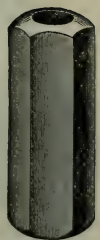
K-745. PIPE AND ROD COUPLING, PIPE OR IRON ROD THREAD.



†K-751. REDUCER COUPLING.



†K-753. REDUCER COUPLING.



*K-749. HEX. COUPLING.

PIPE AND ROD COUPLINGS.

FIGURE	K-745	K-747					K-749					K-751		K-753	
NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PIPE SIZE . . . INCHES	$\frac{3}{8}$	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SIZE ROD . . . INCHES	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$x$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$x$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{3}{8}$	$\frac{7}{16}$
THREADS TO THE INCH .	----	14	16	12x14	12	12	14	16	12x14	12	12	----	----	----	----
		Regular	To order				Regular	To order							
GALVANIZED . PER POUND	.22	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.30	.30	.30	.30
PLAIN . . . PER POUND	.18	.16	.16	.16	.16	.16	.16	.16	.16	.16	.16	.25	.25	.25	.25
BRASS . . . PER POUND	----	----	----	----	----	----	.50	.50	.50	.50	.50	----	----	----	----

*K-747 is made of malleable iron in four sizes and K-749 in three sizes, plain or galvanized. Fourteen threads for $\frac{3}{8}$-inch and 12 threads for $\frac{7}{16}$ and $\frac{1}{2}$-inch is regular for most Pump Rods.

†K-751 and K-753 are for $\frac{1}{2}$ and $\frac{3}{8}$-inch Pipe and Steel Pump Rods.



K-758. TOOL COUPLING.



K-760. TURNED COUPLING.



K-762. STEEL SUBSTITUTES.



K-764. HEX. LOCK NUT.

TOOL COUPLINGS, ESPECIALLY FOR USE WITH WELL TOOLS.—K-758.

PIPE SIZE . . . . . INCHES	1	1¼	1½	2
LENGTH . . . . . INCHES	3½	3¾	3¾	3¾
WROUGHT IRON, HEAVY . . . . . EACH	.20	.26	30	.40

TURNED COUPLINGS.—K-760.

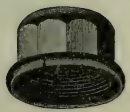
SIZE CYLINDER . . . . . INCHES	2	2	2	2½	2½	2½	3	3	3	4
SIZE STRAINER . . . . . INCHES	1¼	1	1½ R. & L. Threads	1¼	1½	1½ R. & L. Threads	1½	2	2 R. & L. Threads	2½
WROUGHT IRON, TURNED AND FACED. EACH	.12	.20	.24	.20	.25	.40	.30	.60	.60	.60

These Couplings are used to suspend Strainer from Shoe or Shoulder in Well and to seat Tubular Well Check Valve.

STEEL SUBSTITUTES (from Wrought Forged Sucker Rod Coupling Thread to Pipe Thread).—K-762.

NUMBER	1	2	3	4	5	6	7
SIZE OF PIN, WT. FORGED COUPLING . . INCHES	$\frac{5}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	1	1⅛	1⅛	1½
PIPE SIZE . . . . . INCHES	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	¾	1	1¼
PRICE . . . . . EACH	.50	.70	.70	1.50	2.25	2.25	3.00

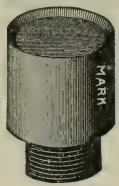
K-764. Hexagon Lock Nuts for Pump Rods. Galvanized, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$-inch. Each, .30.



K-770.
MAL. DRIVE CAP.



K-772.
STEEL DRIVE HEAD.



K-774.
PIPE DRIFT.



K-776.
REAMER.

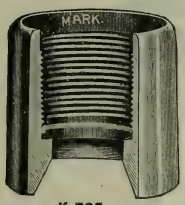


K-778.
BLIND VALVE.

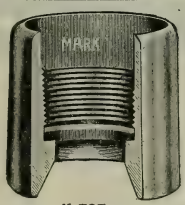
PIPE SIZE . . . . . INCHES	1¼	1½	2	2½	3	4	5	6
K-770. MAL., EX. HY., FOR DRIV. WELL POINTS AND PIPE EACH	.20	.24	.44	1.00	1.25	1.50	-----	-----
K-772. STEEL DRIVE HEADS . . . . . EACH	1.50	2.00	2.50	6.00	9.00	16.00	24.00	30.00
K-774. PIPE DRIFT FOR TUBULAR WELL PIPE . . . . . EACH	----	----	5.00	7.00	10.00	-----	-----	-----
K-776. REAMERS, TO REAM ENDS TUBULAR WELL PIPE . EACH	----	----	1.50	2.00	3.00	-----	-----	-----

HYDRAULIC BLIND VALVES.—K-778.

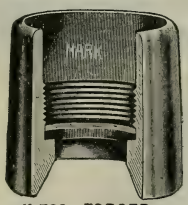
FOR 1-INCH PIPE (2-INCH WELLS) . . . . . EACH	1.40
FOR 1¼-INCH PIPE (3-INCH WELLS) . . . . . EACH	2.00
FOR 2-INCH PIPE (4-INCH WELLS) . . . . . EACH	5.00



K-785.
MAL. IRON DRIVE SHOE.



K-787.
CAST STEEL DRIVE SHOE.



K-789. FORGED
WROUGHT STEEL SHOE.



K-791.
ROTARY SHOE.

DRIVE SHOES.

PIPE SIZE . . . . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	10	12	14	15	16
K-785. WITH OR WITHOUT SHOULDER	.50	.70	.90	1.20	1.50	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
*K-787. STEEL, FINISHED . . EACH	1.00	1.30	2.00	3.50	4.00	6.00	7.00	9.00	-----	12.00	-----	-----	-----	-----	-----
K-787, STEEL, ROUGH . . . EACH	.80	1.10	1.50	2.50	2.75	3.75	4.25	6.50	-----	8.00	-----	-----	-----	-----	-----
K-789. FORGED WT. STEEL . EACH	1.50	2.50	3.50	5.00	6.00	8.00	10.00	12.00	15.00	18.00	36.00	48.00	70.00	90.00	110.00
K-791. TOOL STEEL, STAND. LENGTH	8.00	8.80	9.60	10.70	12.00	13.50	15.50	17.50	20.00	22.50	36.00	64.00	-----	96.00	-----
K-791. TOOL STEEL, EXTRA LENGTH	10.70	11.80	13.00	14.30	16.00	18.50	20.50	23.00	27.00	30.00	50.00	84.00	-----	130.00	-----
K-791. MACH. STEEL, STAND. LENGTH	5.00	5.40	6.60	8.20	9.50	11.00	12.00	13.50	15.00	17.00	27.00	48.00	-----	72.00	-----
K-791. MACH. STEEL, EXTRA LENGTH	6.70	7.60	8.80	11.00	12.50	14.50	16.00	18.00	20.00	23.00	36.00	64.00	-----	96.00	-----

*K-787 for Well Casing, 5⅝-inch, Finished, each, $9.00; Rough, each, $6.50.

K-787 being made of Cast Steel, these are stronger than Malleable. The Finished Shoe is turned true inside and outside.

K-789 is made of Forged Steel and turned true inside and outside. It has long recess to prevent pipe from spreading or breaking off at end of threads. We recommend it for severe driving and large pipe.

Shoes for Well Casing finished at price of Forged Shoes. Intermediate sizes at price of next size higher.



K-795.

RUBBER BUCKETS FOR CHAIN PUMPS.

K-795.	1⅝-inch	per dozen, 2.25
K-797.	1⅞-inch	per dozen, 2.00
K-797.	2-inch	per dozen, 4.00



K-797.



K-800. OCTAGON WOOD PUMP RODS.

SIZE OF ROD . . . . . INCHES	1⅛	1⅝	1⅞	2¼	3½
ADAPTED FOR WORKING BARRELS, DIAMETER . . . . . INCHES	1⅜ to 2¼	2¼ to 2¾	2¾ to 3¾	3¾ to 5¾	5¾ to 8¾
BLANK . . . . . PER FOOT	.04	.05	.09	.14	.30
FITTED WITH FORGED SUCKER ROD COUPLINGS . . . . . PER FOOT	.08	.11	.18	.25	.65
WITH GALV. FORGED SUCKER ROD COUPLINGS AND COPPER RIVETS . PER FOOT	.15	.20	.30	.40	1.10

These Rods are made of the best selected Ash and furnished, unless otherwise specified, in random lengths of about 20 feet.



K-805. WROUGHT FORGED SUCKER ROD COUPLINGS.

NUMBER	1	2	3	4	5
SIZE BOX AND PIN . . . . . INCHES	⅝	⅞	1	1⅛	1½
SIZE WOOD ROD . . . . . INCHES	1⅛	1⅝	1⅞	2¼	3½
ADAPTED FOR WORKING BARRELS, DIAMETER . . . . . INCHES	1⅜ to 2¼	2¼ to 2¾	2¾ to 3¾	3¾ to 5¾	5¾ to 8¾
PLAIN . . . . . PER SET	.60	.75	1.30	2.00	5.00
GALVANIZED . . . . . PER SET	.85	1.15	1.75	2.60	6.00

These Couplings are forged, have straight Box and Pin same size as Oil Well Couplings, and are interchangeable with them.

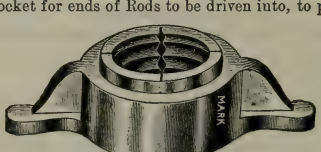


K-810. WOOD ROD COUPLINGS.

FOR ROD . . . . . INCHES	1 and 1⅛	1¼ and 1⅜	1½ and 1¾
2-HOLE, PLAIN . . . . . PER 100	10.00	-----	-----
2-HOLE, GALVANIZED . . . . . PER 100	14.00	-----	-----
3-HOLE, PLAIN . . . . . PER 100	16.00	20.00	-----
3-HOLE, GALVANIZED . . . . . PER 100	20.00	24.00	-----
4-HOLE, PLAIN . . . . . PER 100	20.00	24.00	60.00
4-HOLE, GALVANIZED . . . . . PER 100	24.00	28.00	80.00

These Couplings are made with a Socket for ends of Rods to be driven into, to prevent splitting.

This Pipe Puller is arranged to draw all sizes of pipe. The dies are serrated so as to hold fast to the pipe and not to crush it It is large enough in diameter for the coupling of the pipe to pass through.



K-815.

One set of any size dies, for size puller, are furnished with puller without extra charge.

Extra sets of dies are furnished at same discount from list as puller.

PIPE PULLERS.—K-815.

HOLDS PIPE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6
NO. 2, WITH ¾, 1, 1¼, 1½ OR 2-INCH DIES . .	---	---	---	---	2.75	---	-----	-----	-----	-----	-----	-----
EXTRA DIES FOR NO. 2	.90	.80	.75	.50	.50	---	-----	-----	-----	-----	-----	-----
NO. 3, WITH 2, 2½ OR 3-INCH DIES	---	---	---	---	-----	---	5.00	-----	-----	-----	-----	-----
EXTRA DIES FOR NO. 3	---	---	---	---	.80	.75	.75	-----	-----	-----	-----	-----
NO. 4, WITH 3½ OR 4-INCH DIES	---	---	---	---	-----	---	-----	-----	8.50	-----	-----	-----
EXTRA DIES FOR NO. 4	---	---	---	---	-----	---	2.25	2.00	1.75	-----	-----	-----
NO. 5, WITH 4, 4½ OR 5-INCH DIES	---	---	---	---	-----	---	-----	-----	-----	-----	10.00	-----
EXTRA DIES FOR NO. 5	---	---	---	---	-----	---	3.25	3.00	2.75	2.50	2.00	-----
NO. 6, WITH 4, 4½, 5 OR 6-INCH DIES	---	---	---	---	-----	---	-----	-----	-----	-----	-----	12.00
EXTRA DIES FOR NO. 6	---	---	---	---	-----	---	-----	-----	3.00	2.75	2.50	2.25



K-820. LIFTING AND SLIDING TONGS.



K-828. SCREEN GRAB.



K-826. TAPER TAP.



K-822. LIFTING AND SLIDING TONGS.



K-824. INSIDE PIPE PULLER.

LIFTING AND SLIDING TONGS. K-820 and K-822.

NUMBER	1	2	3	4	5
FOR PIPE . . . . . INCHES	¾	1	1¼	1½	2
PRICE . . . . . EACH	4.00	4.50	5.00	5.50	6.00

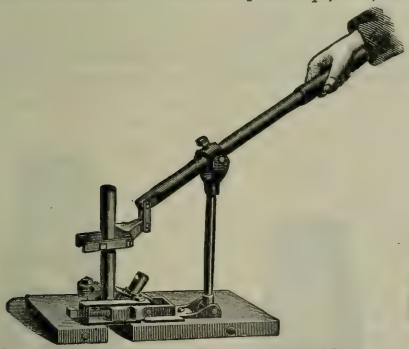
INSIDE PIPE PULLER.—K-824.

PULLS PIPE . . . INCHES	2	2½	3	3½	4
PULLING PIPE CONNECTIONS .IN.	1	1¼	2	2½	2½
WEDGE PIPE CONNECTIONS .IN.	⅝	⅝	⅝	½	½
EACH	13.00	18.00	26.00	38.00	43.00

TAPER TAPS (for Pulling Hollow Rods).—K-826.

FITTED FOR 1 -INCH PIPE, TO PULL ⅜ TO 1¼-INCH PIPE . . . . . EACH	4.50
FITTED FOR 1¼-INCH PIPE, TO PULL ¾ TO 2 -INCH PIPE . . . . . EACH	6.25
FITTED FOR 1½-INCH PIPE, TO PULL 2 TO 3 -INCH PIPE . . . . . EACH	12.00

K-828. Screen Grab. To screw to ¾-inch Pipe, each, .80; 1-inch Pipe, each, $1.30.

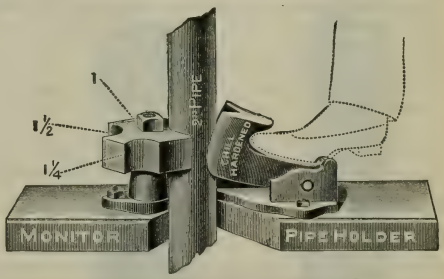


K-832. BABCOCK PIPE LIFTER AND HOLDER.

Holds Pipe from 1 to 2 inches, inclusive.

Price . . . . . each, net, $6.50

For raising and holding Pipe and lowering it into a well, this holder is simple and rapid in operation.

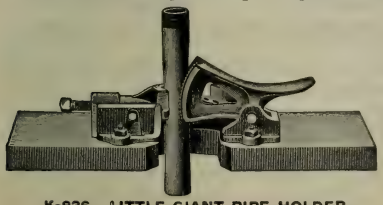


K-834. MONITOR PIPE HOLDER.

Holds Pipe from 1 to 2 inches, inclusive.

Price . . . . . each, net, $5.00

The adjustment to different sizes of Pipe is automatic.



K-836. LITTLE GIANT PIPE HOLDER.

LITTLE GIANT PIPE HOLDERS.—K-836.

Holds 1, 1¼ and 1½-inch Pipe, inclusive.

Price . . . . . each, $4.00

This Holder is easily adjusted to the different sizes by turning a set screw. It is mounted on a 2-inch plank, 10 inches wide and 2 feet long.



K-840.



K-842.



K-844.



K-846.



K-848.

EARTH AUGERS.

BORES HOLE . . . . . INCHES	2	2½	3	3½	4	4½	5	6
K-840. CHISEL BIT AUGER, FOR CLAY AND HARD PAN . . . . . EACH	6.00	6.50	7.00	8.50	10.00	15.00	20.00	25.00
K-842. POD AUGER, FOR BORING AND REMOVING CORE . . . . . EACH	6.00	6.50	7.00	8.50	10.00	15.00	20.00	25.00
K-844. RIBBON AUGER, FOR GENERAL BORING . . . . . EACH	6.00	6.50	7.00	8.50	10.00	15.00	20.00	25.00
K-846. TWIST AUGER, FOR GENERAL BORING . . . . . EACH	6.00	6.50	7.00	8.50	10.00	15.00	20.00	25.00
K-848. SPIRAL AUGER, FOR LOOSENING AND REMOVING STONES . . . . EACH	6.00	6.50	7.00	8.50	10.00	15.00	20.00	25.00



K-852. SAND PUMP AND DRILL.



K-854. SAND PUMP AND DRILL.



K-856. PADDY, CLOSED. OUTSIDE THREAD.



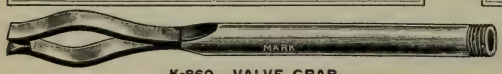
K-858. PADDY, OPEN. INSIDE THREAD.

SAND PUMPS AND DRILLS.—K-852 and K-854.

SIZE OF WELL . . INCHES	2	2½	3	4
PIPE SIZE . . . . INCHES	1	1	1	1
PRICE . . . . . EACH	2.00	3.00	4.00	5.00

EXPANSION DRILLS.—K-856 and K-858.

SIZE . . . . . INCHES	2	2½	3	4
BORES HOLE . . . INCHES	4	4½	5	6½
PRICE . . . . . EACH	5.00	6.50	8.50	11.00



K-860. VALVE GRAB.

VALVE GRABS.—K-860.

For removing Valves from Tubular Wells. Made of Spring Steel, large and strong enough for any size Valves.

Price, . . . each, $1.50



K-865. SPRING PADDY REAMER.



K-867. SHOULDER DRILL.



K-869. HYD. AND JETTING ROCK DRILL.



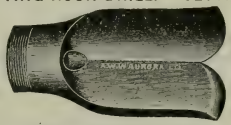
K-871. HYD. AND JETTING ROCK DRILL.



K-875. HYD. AND JETTING UNDER REAMER.



K-873. JETTING DRILL.



K-877. ROTARY DRILL.

†WILL PASS THROUGH PIPE . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	15
*SCREWS TO PIPE . . . . . INCHES	1	1	1¼	1¼	2	2	2½	2½	3	3	3	4	4	6
K-865. SPRING PADDY REAMERS . EACH	9.40	12.60	15.50	22.00	30.00	38.00								
K-865. WINGS ONLY	3.75	4.90	6.20	9.00	12.00	15.00								
EXTRA RIVETS FOR PADDY DRILLS . .	.20	.25	.35	.40	.50	.60	.70	.80	.90	1.00				
K-867. SHOULDER DRILLS . . . EACH	6.25	8.20	10.70	13.30	17.00	22.00	29.00	35.00	45.00	57 00	70.00	85.00	105.00	
K-869. HYD. AND JETTING ROCK DRILLS . . . . . EACH	4.20	5.20	6.30	9.20	10.00	13.50	16.00	20.00	27.00	35.00	42.00	50.00	59.00	80.00
K-871. HYD. AND JETTING ROCK DRILLS . . . . . EACH	3.30	4.30	5.40	6.40	8.30	10.00	12.00	15.00	20.00	27.00	32.00	39.00	47.00	64.00
K-873. JETTING DRILLS . . . . EACH	2.70	3.50	4.30	5.20	6.70	8.00	9.60	12.00	16.00	22.00				
K-875. HYD. AND JETTING UNDER REAMERS . . . . . EACH				40.00	47.00	62.00	74.00	88.00	105.00	122.00	142.00	167.00	200.00	

ROTARY DRILLS.—K-877.

WILL PASS THROUGH PIPE . . INCHES	2	2½	3	3½	4	4½	5	6	7	8	9	10	12	15
*SCREWS TO PIPE . . . . . INCHES	1	1¼	2	2	2½	2½	3	3	4	4	4	5	5	5
EACH	4.20	5.20	6.30	9.20	10.00	13.50	16.00	20.00	27.00	35.00	42.00	50.00	59.00	80.00

*Other shanks than listed, 10 per cent higher. †Intermediate Drills, price of next larger, but next smaller shank. Spring Paddy Reamer trues and enlarges hole sunk too small for pipe to follow. Is used with Jetting Process. Hydraulic Shoulder Drill drills hole in rock for pipe to follow.



K-880. Z DRILL.



K-882. DRILL BAR.



K-884. DRILL WRENCH.

FOR HOLE . . . . . INCHES	2	2½	3
K-880. PIN DIAMETER . . . . . INCHES	1	1	1½
K-880. PIN LENGTH . . . . . INCHES	1½	1½	2⅛
K-880. BOX DIAMETER . . . . . INCHES	1 9/16	1 9/16	2½
K-880. THREADS . . . . . PER INCH	8	8	6
K-882. THREADS . . . . . PIPE THREADS, INCHES	1	1	1½
K-882. BAR DIAMETER . . . . . INCHES	1½	1⅝	2
K-882. BAR LENGTH . . . . . INCHES	14	14	14
K-880. Z DRILL . . . . . EACH	10 00	11.00	13.50
K-882. DRILL BAR . . . . . EACH	12.50	13.50	15.00
K-884. DRILL WRENCH . . . . . EACH	6.60	6.60	9.00



K-891. TAPER JOINT.

ROCK TOOL JOINTS.



K-893. REDUCING STUB.

STYLE OF JOINT	STRAIGHT			TAPER						
JOINT LETTER	A	B	D	AA	BB	CC	DD	EE	FF	GG
SMALLEST HOLE USED IN . . . INCHES	3	4	5	3	4	4½	5	6	8	9
DIAMETER PIN . . . . . INCHES	1½	2	2½	1¼ and 1⅝	1⅝ and 2	2⅛ and 2½	2 and 3	2 and 3	2½ and 3½	3 and 4
LENGTH OF PIN . . . . . INCHES	2½	2½	2⅝	2½	3	3	4	4	4	4
DIAMETER OF BOX . . . . . INCHES	2½	3¼	4¼	2½	3	3½	4½	4⅛	5⅜	6⅝
THREADS	6	6	5	8	8	8	8	8	8	8
PRICE . . . . . PER PAIR	8.00	10.00	13.00	10.00	11.50	13.00	16.00	18.00	23.00	34.00
PIN JOINTS ONLY . . . . . EACH	3.00	4.30	5.75	4.30	5.00	6.00	8.00	8.00	10.50	15.00

K-893.—REDUCING STUBS.

These are made with any desired combination of Joints, Straight, Taper, or both, to connect Tools having different Joints. In ordering state size of Wrench Square wanted. Price of regular length is sum of prices of the two Joints used.



K-895. STRAIGHT JOINT DRILL BAR.



K-897. TAPER JOINT DRILL BAR.

STRAIGHT JOINT DRILL BARS.—K-895.

DIAMETER OF BAR . . . . . INCHES	2	2	2½	3	3	3¼	3½	3½	3½	3¾	4
SMALLEST HOLE USED IN . . . . INCHES	3	4	4	4	5	4	5	4	5	5	6
*SIZE JOINT USED . . . . . LETTER	A	B	B	B	D	B	D	B	D	D	D
APPROXIMATE WEIGHT . . POUNDS PER FOOT	11	..	17	24	..	28	..	32	..	37	42
6-FOOT BARS . . . . . EACH	15.00	17.00	19.00	22.00	25.00	25.00	28.00	27.00	30.00	34.00	39.00
8-FOOT BARS . . . . . EACH	16.00	18.00	21.00	25.00	28.00	28.00	31.00	30.00	33.00	38.00	44.00
10-FOOT BARS . . . . . EACH	17.00	19.00	23.00	27.00	30.00	30.00	33.00	33.00	36.00	42.00	49.00

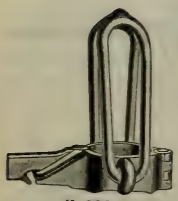
TAPER JOINT DRILL BARS.—K-897.

DIAMETER OF BAR . . . . . INCHES	2	2	2½	2½	3	3	3	3¼	3½	3½	3½	3½	3¾	3¾
SMALLEST HOLE USED IN . . INCHES	3	4	4	4½	4	4½	5	4	4½	5	4½	5	4½	5
*SIZE JOINT USED . . . . . LETTER	AA	BB	BB	CC	BB	CC	DD	BB	CC	DD	CC	DD	CC	DD
APPROXIMATE WEIGHT . POUNDS PER FT.	11	..	17	..	24	..	..	28	..	..	32	..	..	37
6-FOOT BARS . . . . . EACH	17.00	18.00	19.00	20.00	24.00	26.00	28.00	26.00	27.00	30.00	29.00	32.00	33.00	36.00
8-FOOT BARS . . . . . EACH	18.00	19.00	20.00	22.00	26.00	28.00	31.00	29.00	30.00	33.00	33.00	36.00	38.00	41.00
10-FOOT BARS . . . . . EACH	19.00	20.00	22.00	23.00	28.00	30.00	33.00	32.00	33.00	31.00	36.00	39.00	42.00	45.00
12-FOOT BARS . . . . . EACH	20.00	21.00	23.00	25.00	31.00	33.00	36.00	35.00	36.00	39.00	40.00	43.00	46.00	49.00

*See list of Rock Tool Joints, at top of this page. For larger sizes Drill Bars, prices upon application.

PIPE ELEVATOR.—K-899.

PULLS PIPE . . . . . INCHES	2	2½	3	3½	4
K-899. C. C. STEEL . . . . PER PAIR	8.80	9.50	10.50	11.50	12.00
K-899. WROUGHT IRON . . PER PAIR	.....	.....	.....	.....	.....
PULLS PIPE . . . . . INCHES	4½	5	6	8	10
K-899. C. C. STEEL . . . . PER PAIR	14.00	16.00	21.00	.....	.....
K-899. WROUGHT IRON . . PER PAIR	42.00	44.00	47.00	56.00	70.00



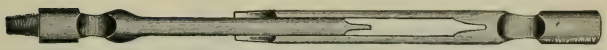
K-899.
PIPE ELEVATOR.

JETTING DRIVE TEE.—K-901.

PIPE SCREWS TO . . . INCHES	2	2½	3	3½	4	4½
OUTLET OF TAP . . . INCHES	1½	1½	1½	2	2	2
EACH, NO SIDE PIPE	5.00	7.50	8.75	10.00	12.00	14.00
PIPE SCREWS TO . . . INCHES	5	6	7	8	9	10
OUTLET OF TAP . . . INCHES	2½	2½	3	3	3	4
EACH, NO SIDE PIPE	17.00	20.00	25.00	31.00	38.00	47.00



K-901.
JETTING TEE.



K-905. STEEL SWAGED JAR.



K-907. ROPE LOOP.



K-909. ROPE SOCKET.



K-911. EYE LOOP.

JARS, ROPE SOCKETS AND LOOPS, WITH STRAIGHT JOINTS.

SMALLEST HOLE WORKS IN . . . . . INCHES	3	3½	3¾	4	4¼	4½	5
*SIZE JOINTS USED . . . . . LETTER	A	A	A	B	B	B	D
K-905. STEEL SWAGED JARS . . . . . EACH	26.00	31.00	35.00	37.00	39.00	41.00	55.00
K-907. ROPE LOOP, OR K-909 ROPE SOCKET. . . . . EACH	8.50	9.00	10.00	11.00	11.50	12.00	15.00
K-911. EYE LOOP. . . . . EACH	6.50	6.50	6.50	8.00	8.00	8.00	10.00

JARS, ROPE SOCKETS AND LOOPS, WITH TAPER JOINTS.

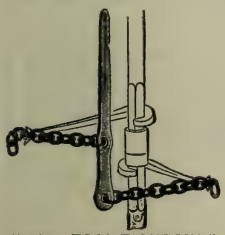
SMALLEST HOLE WORKS IN . . . . . INCHES	3	3½	3¾	4	4¼	4½	5	6	8	9
*SIZE JOINTS USED . . . . . LETTER	AA	AA	AA	BB	BB	CC	DD	EE	FF	GG
K-905. STEEL SWAGED JARS . . . . . EACH	28.00	33.00	37.00	39.00	41.00	44.00	58.00	61.00	69.00	93.00
K-907. ROPE LOOP, OR K-909 ROPE SOCKET. EACH	9.00	10.00	11.00	12.00	13.00	14.00	17.00	19.00	23.00	34.00
K-911. EYE LOOP . . . . . EACH	7.00	7.50	7.50	9.00	9.00	10.00	12.00	13.00	16.00	22.00



K-913. DRILL WRENCH.

*FOR JOINTS . . . . . LETTER	A	B	D	AA	BB	CC	DD	EE	FF	GG
SIZE OPENING . . . . . INCHES	1⅞	2⅛	3¼	1⅞	2¼	2⅜	3¼	3¼	4	4½
K-913 . . . . . EACH	8.00	8.50	9.00	8.00	8.50	8.75	9.50	11.00	16.00	20.00

*Letters refer to table of Rock Tool Joints, page 350.

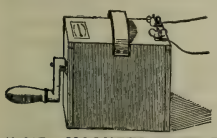


K-915. TOOL TIGHTENER.

TOOL TIGHTENERS.—K-915.

To use this Tool, Wrenches must have claws for the chain to hook into. It is the most powerful and the simplest of all devices for the tightening or loosening of Tools.

Price . . . . . each, $5.00



K-917. MAGNETO BATTERY.

ELECTRIC WELL BLASTING OUTFIT.

K-917.	Battery No. 1 . . . . . each,	$18.00
K-919.	Exploding Cable . . . . . per 100 feet,	2.25
	Exploders, 4 feet wires . . . . . per doz.,	.60
	Insulating Tape . . . . . per roll,	.60
	Double Strand Exploding Cable . . . . per 100 feet,	2.25
	*Dynamite (60 per cent. strong) in 25-lb. lots (none less),	7.50

*Dynamite is always shipped from mill direct by freight. Express companies will not handle it.



K-919. COPPER EXPLODING CABLE.

EXCAVATOR ROCK TOOL DRILLS.



K-924. HARD ROCK DRILL.



K-926. FLUTED SPUDDING DRILL.

HARD ROCK DRILL.—K-924.

DRILLS HOLE . . . . . INCHES	3	3½	4	4½	5	6
SIZE OF JOINT USED . . . . . LETTER	A	A	B	B	D	D
WEIGHT OF STEEL . . . . . POUNDS	20	25	30	40	50	75
PRICE . . . . . EACH	9.00	11.00	15.00	19.00	24.00	28.00

FLUTED SPUDDING DRILL.—K-926.

DRILLS HOLE . . . . . INCHES	8	8	9	9	10	10	12	12	15	18
SIZE OF JOINT USED . . . . . LETTER	DD	FF	DD	FF	FF	GG	FF	GG	GG	GG
PRICE . . . . . EACH	34.00	38.00	43.00	47.00	50.00	56.00	60.00	68.00	80.00	96.00



K-928. HARD ROCK DRILL.



K-930. HARD ROCK DRILL.

DRILLS.—K-928 and K-930.

DRILLS HOLE . . . . . INCHES	3	3½	4	4½	5	6	7	8	8	10	10	12
WEIGHT OF STEEL . . . . POUNDS	20	25	30	40	50	75	95	120	120	150	150	175
SIZE OF JOINT . . . . . LETTER	AA	AA	BB	CC	CC	DD	DD	DD	FF	FF	GG	FF
PRICE . . . . . EACH	10.00	12.00	16.00	20.00	24.00	29.00	32.00	37.00	40.00	55.00	60.00	66.00
SIZE OF JOINT . . . . . LETTER	A	A	B	B	D	D	----	----	----	----	----	----
PRICE . . . . . EACH	9.00	11.00	15.00	19.00	24.00	28.00	----	----	----	----	----	----



K-932.
GAUGE TO MEASURE TOOLS WHEN SHARPENING.

GAUGES.—K-932.

SIZE DRILLS FOR . INCHES	3 to 5⅝	6 to 8	8½ to 12	Larger.
PRICE . . . . . EACH	1.30	1.80	2.50	4.00



K-934.
THREAD PROTECTORS.
Each, . . .50



K-940.
BALE SAND
PUMP.



K-944.
JAR SAND
PUMP.



K-946.
DRILLING SAND
PUMP.



K-942.
GALVANIZED
SAND PUMP.



K-948.
BOTTOM,
WITH K-940, K-944, K-942.
JARS LOOSE IF WEDGED
IN A HOLE.



K-954.
STEEL DART.



K-950.
HEAVY STEEL
BOTTOM.



K-952.
C. C. STEEL
BOTTOM.



K-956.
FLUTED
BOTTOM.

SAND PUMPS.—K-940 and K-942.

OUTSIDE DIAMETER . . . . . INCHES	1⅝	2⅜	2⅞	3½	4	5	6⅝	7⅝	8⅝
K-940, 6-FOOT, WITH K-948 BOTTOM . . . . . EACH	3.50	4.60	6.20	7.70	9.20	12.20	15.00	18.70	23.50
K-940, 6-FOOT, WITH K-950 BOTTOM . . . . . EACH	------	------	13.30	16.00	18.80	23.00	27.50	------	------
K-940, 6-FOOT, WITH K-952 BOTTOM . . . . . EACH	------	------	7.70	9.35	11.20	14.40	17.50	21.70	26.75
K-940, 6-FOOT, WITH K-954 BOTTOM . . . . . EACH	------	------	8.40	10.10	12.20	15.40	18.75	23.00	28.25
K-940, 6-FOOT, WITH K-956 BOTTOM . . . . . EACH	------	------	7.70	9.35	11.20	14.40	17.50	21.70	26.75
ADDITIONAL LENGTHS TO 18 FEET . . . . . PER FOOT	.20	.33	.50	.70	.85	1.25	1.60	2.10	2.70
K-942, 3-FOOT, COMPLETE . . . . . EACH	------	------	------	------	5.50	5.90	6.70	8.40	10.00
FOR EACH ADDITIONAL 2 FEET, ADD	------	------	------	------	2.50	2.70	3.00	3.75	4.10

JAR SAND PUMPS, 6-FOOT LENGTHS.—K-944.

OUTSIDE DIAMETER . . . . . INCHES	1⅝	2⅜	2⅞	3½	4	5	6⅝	7⅝	8⅝
WITH K-948 BOTTOM . . . . . EACH	3.75	5.25	7.20	9.20	11.20	15.00	18.20	25.80	28.30
WITH K-950 BOTTOM . . . . . EACH	------	------	14.30	17.50	20.80	25.80	30.70	------	------
WITH K-952 BOTTOM . . . . . EACH	------	------	8.70	10.85	13.20	17.20	20.70	28.80	31.50
WITH K-954 BOTTOM . . . . . EACH	------	------	9.40	11.60	14.26	18.20	22.00	30.15	33.50
WITH K-956 BOTTOM . . . . . EACH	------	------	8.70	10.85	13.20	17.20	20.70	28.80	31.50
ADDITIONAL LENGTHS TO 18 FEET . . . . . PER FOOT	.20	.33	.50	.70	.85	1.25	1.60	2.10	2.70

DRILLING SAND PUMPS, 6-FOOT LENGTHS.—K-946.

OUTSIDE DIAMETER . . . . . INCHES	3½	4	5	6⅝	7⅝	8⅝
SIZE OF PIN JOINTS . . . . . LETTER	BB	DD	DD	DD	DD	DD
PRICE . . . . . EACH	29.00	37.00	44.00	50.00	56.00	63.00
ADDITIONAL LENGTHS TO 18 FEET . . . . . PER FOOT	.70	.85	1.25	1.60	2.10	2.70

SAND PUMP BOTTOMS.—K-948, K-950, K-952, K-954 and K-956.

OUTSIDE DIAMETER . . . . . INCHES	1⅝	2⅜	2⅞	3½	4	5	6⅝	7⅝	8⅝
K-948. LEATHER FACED BOTTOM . . . . . EACH	1.00	1.20	1.40	1.70	1.90	2.20	2.50	2.90	3.75
K-950. METAL VALVE BOTTOM . . . . . EACH	------	------	8.50	10.00	11.50	13.00	15.00	------	------
K-952. LEATHER FACED BOTTOM . . . . . EACH	------	------	2.90	3.35	3.90	4.40	5.00	5.90	7.00
K-954. DART VALVE BOTTOM . . . . . EACH	------	------	3.60	4.10	4.90	5.40	6.25	7.25	9.00
K-956. METAL VALVE BOTTOM . . . . . EACH	------	------	2.90	3.35	3.90	4.40	5.00	5.90	7.00



*K-962. ROD LIFTER.



†K-964. SWIVEL HOOK.



K-965. STRAPPED C HOOK. FOR RIGGING PULLEYS, ETC.



§K-966. PIPE ELEVATOR.

HOOKS AND LIFTERS.—K-962, K-964 and K-965.

SIZE IRON IN HOOK, DIAMETER . . . INCHES	1	1¼	1½	1¾	2	2½
K-962. ROD LIFTERS . . . EACH	....	3.25	3.75	-----	-----	-----
K-964. SWIVEL HOOKS, MADE OF 1, 1¼, 1½, 1¾, 2-INCH IRON . . . EACH	5.00	8.00	12.00	17.00	21.00	-----
K-965. STRAPPED C HOOKS . . . EACH	----	----	3.70	5.00	6.70	10.00

*K-962 Rod Lifter handles 1 and 1¼-inch Pipe in one end and 2-inch in the other. When one length is raised it slides down on next length.

†K-964 Swivel Hook.

§K-966 Pipe Elevator. This is used for hoisting Drill Rods by catching under Couplings. When a length is raised the Elevator slides down for removing. To grip 1-inch Rod, each 3.75; 1¼-inch, 5.00; 1½-inch, 6.70; 2-inch, 9.25.

PIPE ELEVATORS.—K-966.

PULLS PIPE . . . INCHES	1	1¼	1½	2
K-966 . . . EACH	3.75	5.00	6.70	9.25

JETTING SWIVELS.



K-970. JETTING SWIVEL.



K-972. ROTARY SWIVEL, BALL BEARING.



K-974. ROTARY SWIVEL.



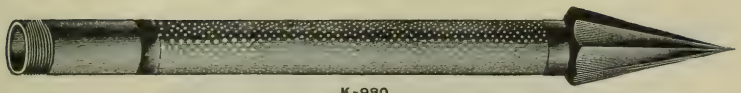
K-976. ROTARY SWIVEL.

SCREWS TO PIPE . . . INCHES	1	1¼	1½	2	2½	3
‡K-970. JETTING SWIVELS . . . EACH	14.00	17.50	29.00	37.00	46.00	69.00
‡K-972. ROTARY SWIVELS . . . EACH	-----	-----	47.00	57.00	75.00	93.00
K-974. ROTARY SWIVELS . . . EACH	6.00	7.50	10.00	12.50	-----	-----
K-976. WITH GUIDE ROD NOT SHOWN . . . EACH	7.50	9.25	12.00	14.50	-----	-----

K-970 is used for conducting water to Drill Rods when Jetting.

K-972 is a Ball-bearing Rotary Swivel used for conducting water to Pipe being sunk by revolving process.

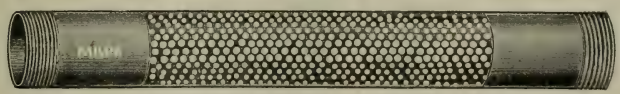
‡Inlet Pipe to and including Elbow only.



K-980.

BRASS JACKET POINTS, MADE OF GALVANIZED IRON PIPE.

Trade Number.	Diameter. Inches.	Length of Point. Inches.	Length of Jacket. Inches.	Number of Holes.	60 Gauze. Per Dozen.	70 Gauze. Per Dozen.	80 Gauze. Per Dozen.	90 Gauze. Per Dozen.	100 Gauze. Per Dozen.
74	1	24	18	72	33.00	40.00	46.00	52.00	62.00
76	1	30	24	96	42.00	49.00	56.00	64.00	78.00
78	1	36	30	120	51.00	59.00	66.00	76.00	94.00
80	1	42	36	144	60.00	68.00	76.00	88.00	120.00
82	1	48	42	168	69.00	78.00	86.00	100.00	136.00
84	1	54	48	197	78.00	87.00	96.00	112.00	152.00
86	1¼	20	14	80	30.00	36.00	42.00	50.00	64.00
90	1¼	24	18	100	36.00	44.00	52.00	60.00	80.00
94	1¼	30	24	130	46.00	55.00	64.00	75.00	100.00
98	1¼	36	30	165	56.00	66.00	76.00	90.00	120.00
100	1¼	42	36	200	66.00	77.00	88.00	105.00	140.00
102	1¼	48	42	270	76.00	88.00	100.00	120.00	160.00
106	1¼	54	48	260	86.00	99.00	112.00	135.00	180.00
110	1½	60	54	290	96.00	110.00	124.00	150.00	200.00
112	1½	66	60	320	106.00	121.00	136.00	165.00	220.00
114	1½	72	66	350	116.00	132.00	148.00	180.00	240.00
136	1½	24	18	120	48.00	57.00	65.00	78.00	94.00
140	1½	30	24	162	60.00	70.00	80.00	96.00	118.00
144	1½	36	30	198	72.00	84.00	95.00	114.00	142.00
146	1½	42	36	240	84.00	97.00	110.00	132.00	166.00
148	1½	48	42	276	96.00	111.00	125.00	150.00	188.00
150	1½	54	48	312	108.00	124.00	140.00	168.00	204.00
152	1½	60	54	348	120.00	138.00	155.00	186.00	228.00
154	1½	66	60	384	132.00	151.00	170.00	204.00	252.00
156	1½	72	66	420	144.00	165.00	185.00	222.00	276.00
160	2	24	18	144	75.00	85.00	94.00	110.00	130.00
164	2	30	24	208	90.00	101.00	112.00	132.00	160.00
168	2	36	30	264	105.00	118.00	130.00	154.00	190.00
170	2	42	36	288	120.00	134.00	148.00	176.00	220.00
172	2	48	42	336	135.00	151.00	166.00	198.00	250.00
174	2	54	48	384	150.00	167.00	184.00	220.00	280.00
176	2	60	54	432	165.00	184.00	202.00	242.00	310.00
178	2	66	60	480	180.00	200.00	220.00	264.00	340.00
180	2	72	66	528	195.00	217.00	238.00	286.00	370.00
184	2½	36	30	300	180.00	205.00	230.00	260.00	300.00
188	2½	48	42	360	230.00	265.00	300.00	340.00	400.00
192	2½	60	54	420	280.00	325.00	370.00	420.00	500.00
196	2½	72	66	480	330.00	385.00	440.00	500.00	600.00
200	3	36	30	300	240.00	275.00	310.00	340.00	410.00
204	3	48	42	420	300.00	345.00	390.00	430.00	520.00
208	3	60	54	540	360.00	415.00	470.00	520.00	630.00
212	3	72	66	660	420.00	485.00	550.00	610.00	740.00
216	4	48	36	360	480.00	520.00	560.00	600.00	700.00
220	4	72	60	600	630.00	695.00	760.00	840.00	1000.00
224	4	96	84	840	780.00	870.00	960.00	1080.00	1300.00
228	4	120	108	1080	930.00	1045.00	1160.00	1320.00	1600.00



K-982. OPEN END OR WELL POINT EXTENSIONS.

Made of Wrought Iron Pipe, Galvanized, in any size required. Same list as Brass Jacket Points, K-980.



FLUSH OR TUBULAR WELL POINTS.—K-984.

Trade No.	Diameter. Inches.	Length of Jacket. Inches.	Length of Point. Inches.	No. of Holes.	No. 60 Gauze. Per Dozen.	No. 70 Gauze, Per Dozen.	No. 80 Gauze. Per Dozen.	No. 90 Gauze. Per Dozen.	No. 100 Gauze. Per Dozen
73	1	18	30	72	34.00	40.00	45.00	50.00	55.00
75	1	18	36	72	38.00	44.00	50.00	56.00	66.00
75½	1	24	36	96	43.00	49.00	55.00	62.00	77.00
77	1	24	42	96	47.00	54.00	60.00	68.00	82.00
77½	1	30	42	120	52.00	59.00	65.00	74.00	93.00
79	1	30	48	120	56.00	63.00	70.00	80.00	98.00
79½	1	36	48	144	61.00	68.00	75.00	86.00	109.00
81	1	36	54	144	65.00	73.00	80.00	92.00	114.00
81½	1	42	54	144	70.00	78.00	85.00	98.00	125.00
83	1	42	60	168	74.00	82.00	90.00	104.00	130.00
116	1¼	18	24	100	36.00	44.00	52.00	60.00	80.00
117	1¼	18	30	100	41.00	49.00	57.00	65.00	85.00
117½	1¼	24	30	130	46.00	55.00	64.00	75.00	100.00
118	1¼	24	36	130	51.00	60.00	68.00	80.00	105.00
119	1¼	24	42	130	56.00	65.00	73.00	85.00	110.00
120	1¼	24	48	130	61.00	70.00	78.00	90.00	115.00
121	1¼	30	36	165	56.00	66.00	76.00	90.00	120.00
122	1¼	30	42	165	61.00	71.00	80.00	95.00	125.00
123	1¼	30	48	165	66.00	76.00	85.00	100.00	130.00
124	1¼	30	54	165	71.00	81.00	91.00	105.00	135.00
125	1¼	36	42	200	66.00	77.00	88.00	105.00	140.00
126	1¼	36	48	200	71.00	82.00	92.00	110.00	145.00
127	1¼	36	54	200	76.00	87.00	97.00	115.00	150.00
128	1¼	36	60	200	81.00	92.00	102.00	120.00	155.00
130	1¼	42	54	230	81.00	92.00	104.00	125.00	165.00
130½	1¼	42	60	230	86.00	98.00	110.00	130.00	170.00
131	1¼	42	66	230	91.00	103.00	115.00	135.00	175.00
132	1¼	48	60	260	91.00	104.00	116.00	140.00	180.00
133	1¼	48	66	260	96.00	109.00	122.00	145.00	185.00
135	1¼	48	72	260	101.00	114.00	127.00	150.00	190.00



WASHER POINTS.—K-986.

Trade Number.	Diameter. Inches.	Length of Pipe. Inches.	Number of Holes.	60 Gauze. Per Dozen.	70 Gauze. Per Dozen.	80 Gauze. Per Dozen.	90 Gauze. Per Dozen.	100 Gauze. Per Dozen.
300	1¼	20	50	30.00	36.00	42.00	50.00	64.00
301	1¼	24	60	36.00	44.00	52.00	60.00	80.00
302	1¼	30	80	46.00	55.00	64.00	75.00	100.00
303	1¼	36	100	56.00	66.00	76.00	90.00	120.00
304	1¼	42	120	66.00	77.00	88.00	105.00	140.00
305	1¼	48	140	76.00	88.00	100.00	120.00	160.00
320	1½	24	80	48.00	57.00	65.00	78.00	94.00
321	1½	30	110	60.00	70.00	80.00	96.00	118.00
322	1½	36	130	72.00	84.00	95.00	114.00	142.00
323	1½	42	150	84.00	97.00	110.00	132.00	160.00
324	2	30	140	90.00	101.00	112.00	132.00	160.00
325	2	36	170	105.00	118.00	130.00	154.00	190.00
326	2	42	220	120.00	134.00	148.00	176.00	220.00

These Well Points are made of wrought-iron pipe galvanized, holes bored and countersunk. Each hole is covered with brass wire gauze, held in place by a brass washer and riveted.



K-988. SINGLE SCREEN DRIVE WELL POINTS.



K-988. SHOWING WIRE WOUND UNDER-JACKET







No. 1 PERFORATION. No. 2 PERFORATION. No. 3 PERFORATION. No. 4 PERFORATION. No. 21 PERFORATION.

Single Screen Drive Well Points are made by covering the perforated pipe with a brass jacket of the following sizes of perforated brass, Nos. 1, 2, 3, 4 and 21 perforation (as illustrations above). No. 1 perforation has same size openings as 60 mesh brass wire cloth, No. 2 as 50 mesh, No. 3 as 40 mesh, No. 4 as 20 mesh and No. 21 as 50 mesh.

Number 21 has slotted perforations about one-eighth of an inch long by one sixty-fourth of an inch in width, and is considered much better than perforated brass with round holes, because grains of sand can not lodge in and close the openings.

These points are adapted for use in coarse sand or gravel, and are more efficient than points covered with brass wire cloth, because they do not clog so easily and are less liable to corrode.

When the driving is not severe, points having wire wound on pipe before jacket is put on, as in K-988, are recommended, as the wire holds the jacket away from the pipe and allows the water to filter through all the openings, thus increasing the inlet for water over three times for the same length point.

Trade No.	Inside Diameter Inches	Length of Jacket Inches	Length of Point Inches	Filtering Surface, Covered with Jacket only, Sq. Ins.	Nos. 1, 2, 3, 4, Perforated Brass Per Dozen	No. 21, Perforated Brass Per Dozen	Filtering Surface Wire wound Under Jacket, Sq. Ins.	Nos. 1, 2, 3, 4, Wire wound Under Jacket, Per Dozen	No. 21. Perf. Brass Wire wound Under Jacket. Per Dozen
740	1	14	20	12	27.00	40.00	40	34.00	47.00
741	1	18	24	15	33.00	46.00	51	40.00	53.00
742	1	24	30	20	42.00	56.00	68	49.00	63.00
743	1	30	36	25	51.00	66.00	85	59.00	74.00
744	1	36	42	30	60.00	76.00	102	68.00	84.00
745	1	42	48	35	69.00	86.00	119	78.00	95.00
746	1	48	54	40	78.00	96.00	136	87.00	105.00
747	1	54	60	45	87.00	106.00	153	96.00	115.00
748	1	60	66	50	96.00	116.00	170	106.00	126.00
749	1	66	72	55	105.00	126.00	187	115.00	136.00
750	1¼	14	20	15	30.00	42.00	48	37.00	49.00
751	1¼	18	24	20	36.00	52.00	63	43.00	59.00
752	1¼	24	30	28	46.00	64.00	84	53.00	71.00
753	1¼	30	36	36	56.00	76.00	105	64.00	84.00
754	1¼	36	42	44	66.00	88.00	126	74.00	96.00
755	1¼	42	48	52	76.00	100.00	147	85.00	109.00
756	1¼	48	54	60	86.00	112.00	168	95.00	121.00
757	1¼	54	60	68	96.00	124.00	189	105.00	133.00
758	1¼	60	66	76	106.00	136.00	210	116.00	146.00
759	1¼	66	72	84	116.00	148.00	231	126.00	158.00
760	1½	18	24	24	48.00	65.00	72	57.00	74.00
761	1½	24	30	33	60.00	80.00	96	69.00	89.00
762	1½	30	36	42	72.00	95.00	120	82.00	105.00
763	1½	36	42	51	84.00	110.00	144	94.00	120.00
764	1½	42	48	60	96.00	125.00	168	108.00	137.00
765	1½	48	54	69	108.00	140.00	192	120.00	152.00
766	1½	54	60	78	120.00	155.00	216	132.00	167.00
767	1½	60	66	87	132.00	170.00	240	146.00	184.00
768	1½	66	72	96	144.00	185.00	264	158.00	199.00
770	2	18	24	29	75.00	94.00	90	87.00	106.00
771	2	24	30	39	90.00	112.00	120	102.00	124.00
772	2	30	36	49	105.00	130.00	150	119.00	144.00
773	2	36	42	59	120.00	148.00	180	134.00	162.00
774	2	42	48	69	135.00	166.00	210	151.00	182.00
775	2	48	54	79	150.00	184.00	240	166.00	200.00
776	2	54	60	89	165.00	202.00	270	181.00	218.00
777	2	60	66	99	180.00	220.00	300	198.00	238.00
778	2	66	72	109	195.00	238.00	330	213.00	256.00



K-990. BRASS JACKET BANNER DRIVE WELL POINTS.

INSIDE DIAMETER . . . . . INCHES	1¼	1¼	1¼	1¼	1½	1½	1½	2	2	2
LENGTH OF JACKET . . . . . INCHES	14	18	24	30	18	24	30	18	24	30
LENGTH OF POINT . . . . . INCHES	20	24	30	36	24	30	36	24	30	36
NO. 60 GAUZE . . . . . PER DOZEN	30.00	36.00	46.00	56.00	48.00	60.00	72.00	75.00	90.00	105.00
NO. 70 GAUZE . . . . . PER DOZEN	36.00	44.00	55.00	66.00	57.00	70.00	84.00	85.00	101.00	118.00
NO. 80 GAUZE . . . . . PER DOZEN	42.00	52.00	64.00	76.00	65.00	80.00	95.00	94.00	112.00	130.00
NO. 90 GAUZE . . . . . PER DOZEN	50.00	60.00	75.00	90.00	78.00	96.00	114.00	110.00	132.00	154.00
NO. 100 GAUZE . . . . . PER DOZEN	64.00	80.00	100.00	120.00	94.00	118.00	142.00	130.00	160.00	190.00



K-992. OPEN CENTER DRIVE WELL POINTS.

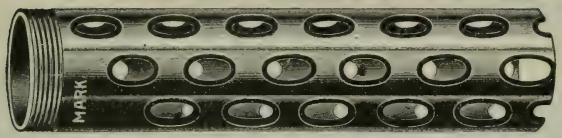
INSIDE DIAMETER . . . . . INCHES	1¼	1¼	1¼	1¼	1½	1½	1½	1½	2	2
LENGTH OF JACKET . . . . . INCHES	18	24	30	36	18	24	30	36	18	24
LENGTH OF POINT . . . . . INCHES	24	30	36	42	24	30	36	42	24	30
NO. 60 GAUZE . . . . . PER DOZEN	36.00	46.00	56.00	66.00	48.00	60.00	72.00	84.00	75.00	90.00
NO. 70 GAUZE . . . . . PER DOZEN	44.00	55.00	66.00	77.00	57.00	70.00	84.00	97.00	85.00	101.00
NO. 80 GAUZE . . . . . PER DOZEN	52.00	64.00	76.00	88.00	65.00	80.00	95.00	110.00	94.00	112.00
NO. 90 GAUZE . . . . . PER DOZEN	60.00	75.00	90.00	105.00	78.00	96.00	114.00	132.00	110.00	132.00
NO. 100 GAUZE . . . . . PER DOZEN	80.00	100.00	120.00	140.00	94.00	118.00	142.00	166.00	130.00	160.00



K-994. MORRIS PERFECTION DRIVE WELL POINTS.

INSIDE DIEMETER . . . . . INCHES	1	1¼	1¼	1¼	1¼	1¼	1½	1½	1½	2	2
LENGTH OF JACKET . . . . . INCHES	30	14	18	24	30	36	18	24	30	18	24
LENGTH OF POINT . . . . . INCHES	36	20	24	30	36	42	24	30	36	24	30
NO. 60 GAUZE . . . . . PER DOZEN	51.00	30.00	36.00	46.00	56.00	66.00	48.00	60.00	72.00	75.00	90.00
NO. 70 GAUZE . . . . . PER DOZEN	59.00	36.00	44.00	55.00	66.00	77.00	57.00	70.00	84.00	85.00	101.00
NO. 80 GAUZE . . . . . PER DOZEN	66.00	42.00	52.00	64.00	76.00	88.00	65.00	80.00	95.00	94.00	112.00
NO. 90 GAUZE . . . . . PER DOZEN	76.00	50.00	60.00	75.00	90.00	105.00	78.00	96.00	114.00	110.00	132.00
NO. 100 GAUZE . . . . . PER DOZEN	94.00	64.00	80.00	100.00	120.00	140.00	94.00	118.00	142.00	130.00	160.00

The Morris Perfection Drive Well Point is made of the best quality malleable iron. It is cast in one piece and in a form that gives the greatest possible strength for driving. The body of the Morris Perfection Drive Well Point is much heavier than that of common pipe points. It has double the filtering surface for the inlet of water than the best well point made of iron pipe. We especially recommend it when there is difficulty in getting a good supply with other points. The entire body, inside and out, of the Morris Perfection Drive Well Point is galvanized, which is the best known coating for iron to be used in water. It is the only malleable iron point galvanized. The Morris Perfection Point costs more than the same length common point, but it has double the filtering surface for the inlet of water as the common point of same length. Its use insures a bountiful supply of water, enables pumps to operate easily and gives the best of satisfaction.

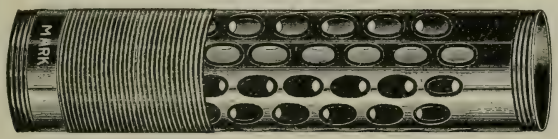


K-996. LARGE SIZE WELL POINTS FOR WATER WORKS AND RAILROADS.

These points are made of heavy pipe, galvanized after the holes are put in. The holes are punched by machinery and are of uniform size and distance apart. We furnish them with drive plug or open end as ordered.

Diameter Pipe Inches	No. 60 Gauze Per Foot	No. 70 Gauze Per Foot	No. 80 Gauze Per Foot	No. 90 Gauze Per Foot	No. 100 Gauze Per Foot
4½	4.00	4.50	5.00	5.50	6.00
5	5.00	5.75	6.50	7.25	8.00
6	5.80	6.50	7.25	8.00	9.00
7	7.00	7.75	8.50	9.25	10.50
8	8.50	9.25	10.00	11.00	12.00
9	11.00	12.00	13.00	14.00	15.00
10	13.00	14.00	15.25	16.50	18.00
12	16.00	17.00	18.50	20.00	22.00

Well points of well casing will be furnished at above price list for same diameter casing; intermediate sizes at list of next larger size.



K-998. IRRIGATION STRAINERS.

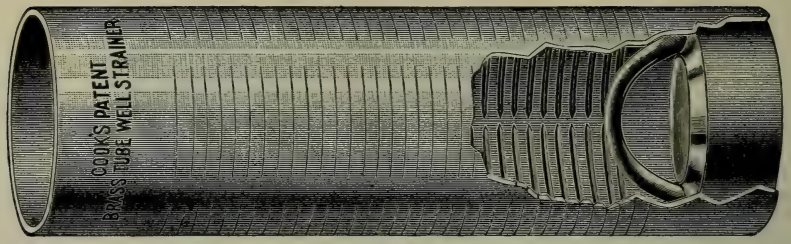
These strainers are made of heavy pipe, galvanized after the holes are put in; they contain more than double the number of holes in our regular strainers, and are covered with a special woven wire cloth, having slotted openings. The cloth is nearly one-sixteenth of an inch in thickness, and is so constructed that every part of its surface permits of filtration.

These strainers are much stronger and more serviceable than all brass strainers, and have over four times the number of openings for the inlet of water. They can be used in wells having heavy pressure or suction without injury to the wire cloth.

For efficiency, heavy work and large filtering capacity these strainers have no equal.

Inside Diameter Inches	Outside Diameter Inches	Openings Per Foot Square Inches	No. 60 Gauze Per Foot	No. 80 Gauze Per Foot	No. 90 Gauze Per Foot	No. 100 Gauze Per Foot
1	1.435	12	.60	.80	1.00	1.25
1¼	1.785	17	.75	.95	1.20	1.50
1½	2.025	22	.90	1.15	1.45	1.75
2	2.495	24	1.25	1.50	1.80	2.25
2½	2.995	27	2.00	2.75	3.25	3.75
3	3.625	30	2.75	3.50	4.00	4.50
3½	4.125	33	3.15	4.00	4.50	5.25
4	4.625	36	3.90	4.75	5.25	6.25
4½	5.125	39	4.50	5.50	6.25	7.25
5	5.685	42	5.25	6.50	7.50	8.25
6	6.745	48	6.00	7.50	8.25	9.25
7	7.745	51	7.50	9.00	9.50	10.75
8	8.745	54	9.00	10.50	11.50	12.50
9	9.805	60	12.00	14.00	15.00	16.00
10	10.875	67	14.00	16.50	18.00	20.00
12	12.875	72	18.00	20.50	22.50	25.00

Above Irrigation Strainers furnished with open ends, unless ordered with driving plug. Six inches of blank on each end of strainer.



K-1000.

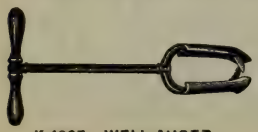
COOK'S PATENT BRASS TUBE WELL STRAINERS.

These Strainers are made of one piece of Seamless Brass Tubing and have no iron connections, therefore will not corrode or rust. The slot openings are cut from the inside and are larger on the inside, therefore will not choke up. The slot style of cutting lets in more water, in sand, than any other opening, and can be cut finer, if desired, than any other opening. These Strainers are not Drive Well Points, but used where pipe is sunk with open bottom.

Inside Diam. Well Pipe Inches	Length Feet	Number of Openings	Each	For Each Additional 2 Feet, Add	Inside Diam. Well Pipe Inches	Length Feet	Number of Openings	Each	For Each Additional 2 Feet, Add
2	2	1,000	3.50	2.25	5	4	2,300	16.00	6.50
2	4	2,100	5.75	------	5	6	3,400	22.50	------
2	6	3,000	8.00	------	5	8	4,600	29.00	------
2	8	4,000	10.25	------	5	10	5,800	35.50	------
2½	2	1,000	4.00	2.50	5	12	7,000	42.00	------
2½	4	2,000	6.50	------	5	14	8,200	48.50	------
2½	6	3,000	9.00	------	6	6	3,900	30.00	8.00
2½	8	4,000	11.50	------	6	8	5,200	38.00	------
3	2	700	5.00	3.00	6	10	6,500	46.00	------
3	4	1,400	8.00	------	6	12	7,800	54.00	------
3	6	2,100	11.00	------	6	14	9,100	62.00	------
3	8	2,800	14.00	------	6	16	10,400	70.00	------
3	10	3,500	17.00	------	6	18	11,700	78.00	------
3	12	4,200	20.00	------	6	20	13,000	86.00	------
3½	2	800	6.75	4.25	7	6	5,100	39.00	11.00
3½	4	1,700	11.00	------	7	8	6,800	50.00	------
3½	6	2,600	15.25	------	7	10	8,500	61.00	------
3½	8	3,400	19.50	------	7	12	10,200	72.00	------
3½	10	4,300	23.75	------	7	14	11,900	83.00	------
3½	12	5,200	28.00	------	7	16	13,600	94.00	------
4	4	1,700	13.00	5.00	7	18	15,300	105.00	------
4	6	2,600	18.00	------	7	20	17,000	116.00	------
4	8	3,400	23.00	------	8	6	5,700	51.00	14.00
4	10	4,300	28.00	------	8	8	7,600	65.00	------
4	12	5,200	33.00	------	8	10	9,500	79.00	------
4½	4	2,300	14.50	5.50	8	12	11,400	93.00	------
4½	6	3,400	20.00	------	8	14	13,300	107.00	------
4½	8	4,600	25.50	------	8	16	15,200	121.00	------
4½	10	5,800	31.00	------	8	18	17,100	135.00	------
4½	12	7,000	36.50	------	8	20	19,000	149.00	------

Strainers will be fitted at top end with lead packer, unless otherwise ordered.

Sizes here given are not actual diameters of Strainers, but are the inside diameters of pipe in which Strainer is to be used. Order by Pipe Size. Outside diameter of Strainer is ¼ to ½ inch less than inside diameter of Well Pipe.



K-1005. WELL AUGER.

SIZE . . . . . INCHES	4	5	6	7	8	9	10	12
EACH	2.35	2.35	2.35	2.50	2.50	2.65	3.00	8.00



L-1. DIE PLATE NUMBER 2.

DIE PLATES.—L-1.
WITH HILL'S PATENT SOLID DIES.

NUMBER	For Brass Pipe 00	0	1	1½	1¾	2	2 Arms 3	3 Arms 4
THREADS, PIPE . . . INCHES	⅝, ¾, ⅞, 1, 1¼	⅛ to ½	¼ to 1	¾ to 1¼	1 to 1½	1¼ to 2	2½ & 3	2½ & 3
SIZE OF DIES . . . INCHES	2x½	2x½	2½x¾	3x¾	3x¾	4x⅞	5x1¼	5x1¼
DIE PLATE COMPLETE . . . EACH	13.50	9.50	15.00	13.50	13.50	20.00	43.00	51.00
EXTRA PARTS OF DIE PLATES.								
DIE PLATE . . . EACH	3.50	3.50	5.00	6.00	6.00	9.50	25.00	33.00
DIES FOR IRON PIPE . . . EACH	2.00	1.50	2.00	2.50	2.50	3.50	9.00	9.00
DIES FOR BRASS PIPE . . . EACH	2.00	2.00	2.50	3.00	3.00	4.00	-----	-----
LEADER SCREWS . . . EACH	----	----	----	3.25	3.25	4.25	6.50	6.50
THUMB SCREWS FOR FACE PLATE OR LEADER SCREW . . . EACH	.40	.40	.40	.40	.40	.40	.60	.60
BRASS FACE PLATE . . . EACH	.70	.70	.70	.80	.80	1.00	2.00	2.00
SET SCREWS FOR FACE PLATE . . . EACH	.20	.20	.25	.25	.25	.25	.35	.35
BUSHINGS . . . EACH	.25	.25	.35	.45	.45	.60	1.00	1.00
HANDLES . . . PER PAIR	2.00	2.50	2.50	3.25	3.25	3.75	6.00	6.00
DIE FRAMES . . . EACH	----	----	.30	.40	.40	.50	.60	.60

No. 2 and larger have Leader Screw.

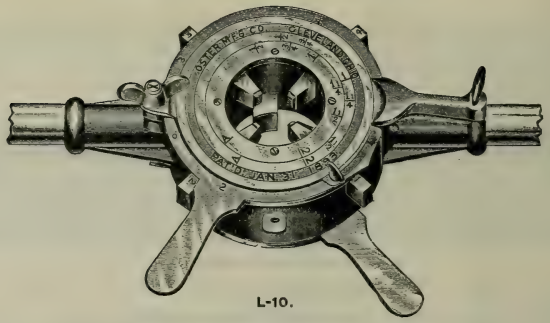


L-5. MILLER'S REVERSIBLE RATCHET DIE PLATE.

MILLER'S REVERSIBLE RATCHET DIE PLATES.—L-5.
WITH HILL'S PATENT SOLID DIES.

Numbers.	Threads.	Dimensions of Dies.	Die Plate Complete.	Without Dies.	Extra Dies.	Extra Bushings.	Extra Die Frames.
A	⅛ to ¾	2 x 2 x ½	13.00	7.50	1.10	.20	----
B	¼ to 1	2½ x 2½ x ¾	15.00	7.50	1.50	.25	.22
C	1 to 1½	3 x 3 x ¾	18.50	13.00	1.80	.35	.30
D	1¼ to 2	4 x 4 x ⅞	20.00	12.50	2.50	.45	.38
E	2½ and 3	5 x 5 x 1¼	43.00	29.00	7.00	.75	.45

C, D, and E have Leader Screws.

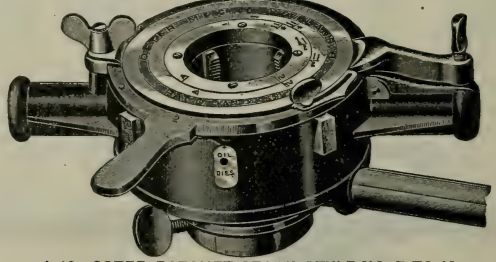


L-10.

OSTER PATENT ADJUSTABLE DIE STOCKS.

NUMBER OF TOOL	0	1	1½	2	3	4	4½	5	6
SIZES OF PIPE EACH TOOL WILL THREAD AND CUT	⅛ ¼–⅜ ½	⅛ ¼–⅜ ½–¾	¼–⅜ ½–¾ 1	¼–⅜ ½–¾ 1–1¼	1–1¼ 1½–2	½–¾ 1–1¼ 1½–2	⅜ ½–¾ 1–1¼ 1½–2	1½–2 2½–3	2½–3 3½–4
WITHOUT CUT-OFF . . . . . EACH	12.00	13.00	14.00	17.00	22.00	25.00	28.00	40.00	55.00
WITH CUT-OFF . . . . . EACH	15.00	16.00	17.00	20.00	25.00	28.00	31.00	45.00	60.00

All the above tools have two handles, as illustrated, except Nos. 5 and 6, which have four solid steel handles.
The dies can be sharpened on a grindstone, like edged tools.
Instantly adjusted, and released from the work without running back over the finished threads.



L-12. OSTER RATCHET STOCK STYLE NO. 7 TO 10.

OSTER PATENT RATCHET DIE STOCKS.

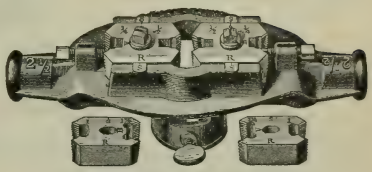
NUMBER OF TOOL	7	8	9	9½	10
THREADS PIPE . . . . . SIZES	1, 1¼, 1½, 2.	2½, 3, 3½, 4.	3, 3½, 4, 4½.	3½, 4, 4½, 5,	2½, 3, 3½, 4, 4½, 5.
WITHOUT CUT-OFF . . . . . EACH	25.00	60.00	70.00	70.00	75.00
WITH CUT-OFF . . . . . EACH	28.00	65.00	77.50	77.50	84.00

EXTRA DIES AND CUT-OFF BLADES.

NUMBER OF TOOL	0	1	1½	2	3	4	4½	5	6	7	8	9	9½	10
PER SET (4 PIECES) RIGHT OR LEFT	1.25	1.50	1.50	1.75	2.00	2.00	2.50	3.00	3.50	2.50	3.50	4.50	4.50	4.50
NUMBER OF SETS TO EACH TOOL	3	3	3	3	2	3	4	2	2	2	2	2	2	3
CUT-OFF BLADES . . . . . EACH	.30	.30	.30	.30	.30	.30	.40	.40	.40	.75	.85	1.15	1.15	1.15



L-20. ARMSTRONG. NO. 2.



L-21. ARMSTRONG. NO. 2½.

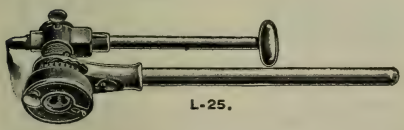
ARMSTRONG'S ADJUSTABLE STOCKS AND DIES.

NUMBER	1	2	2½	3	4	6	7
THREADS	⅛ to ½	¼ to 1	½ to 1¼	1¼ to 2	1½ to 2	2½ and 3	2½ to 4
COMPLETE, WITH RIGHT HAND DIES	9.00	12.00	12.00	20.00	18.00	40.00	60.00
STOCK ONLY	3.25	4.00	4.50	7.00	7.00	25.00	30.00
EXTRA DIES, RIGHT OR LEFT	1.25	1.50	3.25	4.00	3.00	15.00	16.00
EXTRA BUSHINGS	.20	.25	.40	.50	.50	1.00	1.50
EXTRA WRENCHES	.25	.25	.25	.50	...	.50	.75

Price for Extra Dies means per Single Set of two pieces.

NOTE.—No. 4 Stock is a sectional and non-adjustable stock. Nos. 2½, 6, and 7 Stocks are fitted with double-ended dies. Nos. 1 and 2 Stocks are packed in cases, as shown in L-20. Nos. 6 and 7 have four arms.

Armstrong Sectional Dies, Right or Left, all sizes, each, $3.00.



L-25.

CLIMAX RATCHET STOCKS.—L-25.

NUMBER	1	2
THREADS, PIPE—INCHES	¼ to 1	1 to 2
STOCK ONLY—EACH	10.00	17.00
SOLID DIES—EACH	2.00	3.50

Any standard make of Solid Die will fit. Threads can be cut on pipe at any angle or in any position. With this tool it is not necessary to dig up or take out whole lengths of pipe; the defective part of pipe can be cut out and the threads cut on the pieces in the ground with the greatest ease and convenience.



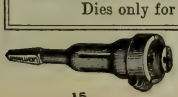
L-45. SINGLE STOCK AND DIE.



L-50. DOUBLE STOCK AND DIES.

LIGHTNING PUMP ROD STOCKS AND DIES.—L-45 and L-50.

L-45.—Complete, with one ⅜-inch Die, 1.70 L-45.—With one $\frac{7}{16}$-inch Die, 1.90 L-45.—With one ½-inch Die, 2.20
Dies only, each, ⅜-inch . . . 1.15 $\frac{7}{16}$-inch . . . . . 1.30 ½-inch 1.50
L-50.—Double Stock, with one ⅜ inch and one $\frac{7}{16}$-inch die, complete 3.00
Dies only for Double Stock, each, ⅜-inch . . . . . 1.00 $\frac{7}{16}$-inch 1.15



L-40. FOR USE IN BIT BRACE.—Holders, each, 75 cents; Dies, each, $1.00; Guides, each, 20 cents; Dies with Guide, each, $1.20. Taps, $\frac{7}{16}$-inch, each, 70 cents; smaller sizes, each, 60 cents.



V THREAD.





U. S. STANDARD THREAD.

L-55. MACHINISTS' SCREW PLATES. EACH SET PACKED IN AN OAK CASE.

AMERICAN STANDARD V THREAD.

GRADUATED AND GAUGED ON DIAL TO STANDARD SIZES. ADJUSTABLE DIES AND GUIDES.

No. 20.—Cutting Pipe — Inches 1/16, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
Threads to the Inch — 24 20 18 16 14 12
Price, with 6 sets of Dies and 6 Taps — 15.00
Extra Dies, Right or Left-hand, Set of 4 — 1.00

No. 21.—Cutting Pipe — Inches 1/16, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
Threads to the Inch — 20 18 16 14 12 11 10
Price, with 7 sets of Dies and 7 Taps — 20.00
Extra Dies, Right or Left-hand, Set of 4 — 1.25

No. 22.—Cutting Pipe — In. 1/16, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 1
Threads to the Inch — 20 18 16 14 12 11 10 9 8
Price, with 9 sets of Dies and 9 Taps — 30.00
Extra Dies, Right or Left-hand, Set of 4 — 1.50

No. 28.—Cutting Pipe — In. 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2
Threads to the Inch — 12 11 10 9 8 7 7 6 6
Price, with 9 sets of Dies and 9 Taps — 48.00
Extra Dies, Right or Left-hand, Set of 4 — 1.75

No. 64.—Cutting Pipe — Inches 1/16, 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
Threads to the Inch — 20 18 16 14 12
Price, with 5 sets of Dies and 5 Taps — 14.00
Extra Dies, Right or Left-hand, Set of 4 — 1.00

No. 65.—Cutting Pipe — Inches 1/4, 3/8, 1/2, 3/4, 1
Threads to the Inch — 12 11 10 9 8
Price, with 5 sets of Dies and 5 Taps — 23.00
Extra Dies, Right or Left-hand, Set of 4 — 1.50

No. 66.—Cutting Pipe — Inches 1 1 1/4, 1 1/2, 2
Threads to the Inch — 8 7 7 6 6
Price, with 5 sets of Dies and 5 Taps — 40.00
Extra Dies, Right or Left-hand, Set of 4 — 1.75

U. S. STANDARD THREADS.

GRADUATED AND GAUGED ON DIAL TO STAND. SIZES. ADJUSTABLE GUIDES.

No. 22½.—Cutting Pipe — Inches 3/16, 1/4, 5/16, 3/8, 7/16, 1/2
Threads to the Inch — 24 20 18 16 14 13
Price, with 6 sets of Dies and 6 Plug Taps — 15.00
Extra Dies, Right or Left-hand, Set of 4 — 1.00

No. 23.—Cutting Pipe — Inches 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4
Threads to the Inch — 20 18 16 14 13 12 11 10
Price, with 8 sets of Dies and 8 Plug Taps — 22.00
Extra Dies, Right or Left-hand, Set of 4 — 1.25

U. S. STANDARD THREADS.

GRADUATED AND GAUGED ON DIAL TO STANDARD SIZES. ADJUSTABLE GUIDES.

No. 24.—Cutting Pipe, In. 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1
Threads to the Inch — 20 18 16 14 13 12 11 10 9 8
Price, with 10 sets of Dies and 10 Plug Taps — 33.00
Extra Dies, Right or Left-hand, Set of 4 — 1.50

No. 23½.—Cutting Pipe — Inches 1/2, 5/8, 3/4, 7/8, 1
Threads to the Inch — 13 11 10 9 8
Price, with 5 sets of Dies and 5 Plug Taps — 23.00
Extra Dies, Right or Left-hand, Set of 4 — 1.50

No. 24½.—Cutting Pipe — Inches 1 1 1/8, 1 1/4, 1 3/8, 1 1/2
Threads to the Inch — 8 7 7 6 6
Price, with 5 sets of Dies and 5 Plug Taps — 40.00
Extra Dies, Right or Left-hand, Set of 4 — 1.75

No. 25.—Cutting Pipe, In. 1/4, 9/16, 5/8, 3/4, 7/8, 1 1 1/8, 1 1/4, 1 3/8, 1 1/2
Threads to the Inch — 13 12 11 10 9 8 7 7 6 6
Price, with 8 sets of Dies and 10 Plug Taps — 55.00
Extra Dies, Right or Left-hand, Set of 4 — 1.75

Taper and Bottoming Taps and Wrenches will be added to these sets at special prices.

U. S. STANDARD THREADS.

GRADUATED AND GAUGED ON THE DIAL TO STANDARD SIZE.

No. 61.—Cutting Pipe — Inches 1/4, 5/16, 3/8, 7/16, 1/2
Threads to the Inch — 20 18 16 14 13
With Taper Plug, Bottoming Taps and Wrench 20.00
With Right and Left-h'd Dies, Taps and Wrench 30.00
Extra Dies, Right or Reft-hand, Set of 4 — 1.00

No. 62.—Cutting Pipe — Inches 1/4, 9/16, 5/8, 3/4, 7/8, 1
Threads to the Inch — 13 12 11 10 9 8
With Taper Plug, Bottoming Taps and Wrench 45.00
With Right and Left-h'd Dies, Taps and Wrench 65.00
Extra Dies, Right or Left-hand, Set of 4 — 1.50

No. 63.—Cutting Pipe — Inches 1 1 1/8, 1 1/4, 1 3/8, 1 1/2
Threads to the Inch — 8 7 7 6 6
With Taper Plug, Bottoming Taps and Wrench 65.00
With Right and Left-h'd Dies, Taps and Wrench 95.00
Extra Dies, Right or Left-hand, Set of 4 — 1.75



L-64.

BRASS PIPE SCREW PLATE.—L-64. WITH FINE THREADS.

Size of Plate	Number of Dies	Threads Brass Pipe, Inches	No. of Threads to the Inch	Price, Complete With Case
35 in. long	5	1/8, 1/4, 3/8, 1 & 1 1/4	1/8 & 1/4, - 20 3/8, 1 & 1 1/4, 18	12.25

Furnished with Right or Left-hand Dies. Right-hand Dies sent unless otherwise ordered.



L-75. TRIMO PIPE CUTTER.

TRIMO PIPE CUTTERS (With Two Extra Wheels in Handle).

NUMBER		1	2	3
CUTS PIPE	INCHES	$\frac{1}{8}$ to $1\frac{1}{4}$	$\frac{1}{2}$ to 2	$1\frac{1}{4}$ to 3
EACH		4.25	6.25	12.25
EXTRA WHEELS	EACH	.30	.30	.40
EXTRA ROLLS	EACH	.25	.30	.50
EXTRA NUTS	EACH	.35	.35	.40

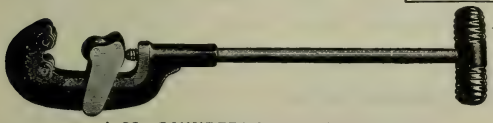
Extra Pins, each, .10; Extra Friction Washers, each, .10; Extra Fork Block Carriers, each, .10.



L-80. STANWOOD IMPROVED CUTTER.

STANWOOD IMPROVED PIPE CUTTERS.—L-80.

NUMBER		1	2	3
CUTS PIPE	INCHES	$\frac{1}{8}$ to 1	$\frac{3}{4}$ to 2	2 to 3
EACH		1.50	2.25	7.00
EXTRA BLOCKS AND WHEELS	EACH	1.00	2.00	5.50
EXTRA WHEELS	EACH	.12	.18	.25
PINS	EACH	.05	.05	.08



L-83. SAUNDERS PIPE CUTTER.



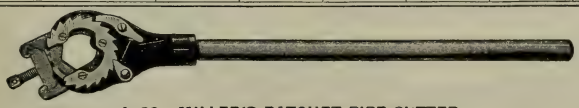
L-86. BARNES PIPE CUTTER.

SAUNDERS PIPE CUTTERS.—L-83.

NUMBER		1	2	3
CUTS PIPE	INCHES	$\frac{1}{8}$ to 1	1 to 2	2 to 3
EACH		3.00	4.50	11.00
EXTRA BLOCKS AND WHEELS	EACH	1.25	1.75	2.75
EXTRA WHEELS	EACH	.24	.32	.60
EXTRA ROLLERS	EACH	.24	.32	.50
EXTRA PINS	EACH	.10	.10	.15

BARNES 3-WHEEL PIPE CUTTERS.—L-86.

NUMBER	1	2	3	4	5	6	7
CUTS PIPE INCHES	$\frac{1}{8}$ to 1	$\frac{1}{8}$ to 2	$1\frac{1}{2}$ to 3	$2\frac{1}{2}$ to 4	4 to 6	6 to 8	9 to 12
EACH	4.50	6.00	10.00	20.00	30.00	40.00	50.00
EXTRA WHEELS EACH	.25	.30	.40	.50	.75	.75	.75
EXTRA WHEEL PINS PER DOZEN	1.00	1.00	1.00	2.00	2.00	2.00	2.00



L-89. MILLER'S RATCHET PIPE CUTTER.

MILLER'S REVERSIBLE RATCHET PIPE CUTTERS.—L-89.

NUMBER	0	1	$1\frac{1}{2}$	2	3
CUTS PIPE INCHES	$\frac{1}{8}$ to $\frac{3}{4}$	$\frac{1}{2}$ to 1	1 to $1\frac{1}{2}$	$1\frac{1}{2}$ to 2	$2\frac{1}{2}$ to 3
EACH	6.75	8.50	10.00	11.00	16.00
EXTRA WHEELS EACH	.12	.18	.18	.25	.40



L-95. STILLSON WRENCH. 6 TO 18 INCHES.



L-96. STILLSON WRENCH, 18 TO 48 INCHES.



L-97. JAW.



L-98. FRAME.



L-99. HANDLE.



L-100. NUT.

STILLSON WRENCHES.

LENGTH WHEN OPEN . . . . . INCHES	6	8	10	14	18	24	36	48
GRIPS . . . . . INCHES	⅛ wire to ½ pipe	⅛ wire to ¾ pipe	⅛ wire to 1 pipe	¼ wire to 1½ pipe	¼ wire to 2 pipe	¼ wire to 2½ pipe	¼ pipe to 3½ pipe	1 pipe to 5 pipe
EACH	2.00	2.00	2.25	3.00	4.00	6.00	12.00	18.00

REPAIRS FOR STILLSON WRENCHES.

SIZE . . . . . INCHES	6	8	10	14	18	24	36	48
JAWS . . . . . EACH	.67	.67	.75	1.00	1.33	2.00	4.00	6.00
FRAMES . . . . . EACH	.25	.25	.33	.45	.55	.65	.75	1.00
HANDLES . . . . . EACH	.15	.15	.20	.25	.30	----	----	----
NUTS . . . . . EACH	.20	.20	.27	.35	.42	.50	.65	.80



L-110. TRIMO PIPE WRENCH



L-115. TRIMO NARROW JAW WRENCH.

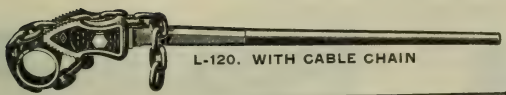
TRIMO WRENCHES.—L-110.

LENGTH WHEN OPEN . . . . . INCHES	6	8	10	14	18	24	36	48
GRIPS . . . . . INCHES	⅛ wire to ½ pipe	⅛ wire to ¾ pipe	⅛ wire to 1 pipe	¼ wire to 1½ pipe	¼ wire to 2 pipe	¼ wire to 2½ pipe	¼ pipe to 3½ pipe	1 pipe to 5 pipe
L-110. PIPE WRENCH . . . . . EACH	2.00	2.00	2.25	3.00	4.00	6.00	12.00	18.00
L-115. NARROW JAW WRENCH . . . . . EACH	2.00	2.00	2.25	----	----	----	-----	-----

The Trimo Narrow Jaw Wrench is designed for close quarter work, for gas fitters, automobiles, etc.

REPAIRS FOR TRIMO WRENCHES.—L-113.

SIZE . . . . . INCHES	6	8	10	14	18	24	36	48
JAWS . . . . . EACH	.67	.67	.75	1.00	1.33	2.00	4.00	6.00
NUTS . . . . . EACH	.20	.20	.27	.35	.42	.50	.65	.80
INSERTED JAWS . . . . . EACH	.25	.25	.33	.50	.55	.65	1.00	1.25
FRAMES . . . . . EACH	.25	.25	.33	.45	.55	.65	.75	1.00



L-120. WITH CABLE CHAIN



L-122. WITH FLAT-LINK CHAIN.

THE VULCAN PATENT DROP-FORGED CHAIN PIPE WRENCHES.

NUMBER	10	11	12	13	13½	14	15
FOR PIPE INCHES	⅛ to ¾	⅛ to 1½	¼ to 2½	¾ to 4	1 to 6	1½ to 8	2 to 12
WITH CABLE CHAIN EACH	2.25	3.25	4.50	6.25	7.75	9.50	16.00
WITH FLAT-LINK CHAIN EACH	2.50	3.50	5.00	7.00	9.00	11.00	18.00
EXTRA CABLE CHAIN EACH	.50	.75	1.00	1.75	2.00	2.50	4.00
EXTRA FLAT-LINK CHAIN EACH	.75	1.00	1.50	2.50	3.25	4.00	6.00
EXTRA JAWS PAIR	1.00	1.75	2.75	4.00	4.75	5.50	7.50
LENGTH OVER ALL INCHES	13¾	20	27	37	44½	50½	64½

The Vulcan Wrench is sold with either cable or flat-link chain, and is the only wrench adapted for either. When ordering, say which chain is desired.

This Wrench is equally efficient on fittings and straight pipe, in corners, against walls, between floors, in ditches, or for overhead work. Each fits a range of sizes equal to six pairs of common tongs, and will outwear several pairs of any kind.

These tools are fully guaranteed and are recommended as the most efficient and economical chain pipe wrenches made. Nothing is spared in their manufacture that adds to their working and wearing qualities.

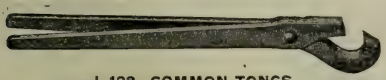
All parts are interchangeable; repairs can always be had.



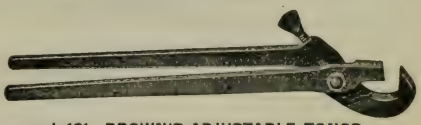
L-125. ROBBINS' CHAIN TONGS.

ROBBINS' CHAIN TONGS.—L-125.

NUMBER	2	3	4	5	6	7
LENGTH OF LEVER INCHES	27	36	48	60	72	84
WEIGHT POUNDS	7	12	24	33	50	100
FOR PIPE INCHES	1 to 2	1¼ to 4	2 to 6	2½ to 8	4 to 10	4 to 16
EACH	5.50	6.25	9.00	12.50	16.00	30.00



L-128. COMMON TONGS.



L-131. BROWN'S ADJUSTABLE TONGS.

COMMON TONGS.—L-128.

SIZE INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4
EACH	.60	.65	.70	.75	.90	1.10	1.30	1.50	1.90	2.50	4.25	5.25	6.25

BROWN'S ADJUSTABLE TONGS.—L-131.

NUMBER	1	1½	2	3	4	5	6	7
FOR PIPE INCHES	⅛ to ¾	⅜ to 1	½ to 1¼	1 to 2	1½ to 3	2½ to 4	3 to 5	4 to 7
EACH	1.30	1.65	2.00	3.00	6.00	11.00	25.00	35.00



L-138. ENGINEER'S WRENCH.



L-140. COES' WRENCH.

ENGINEER'S AND GENUINE COES' WRENCHES.—L-138 and L-140.

SIZE . . . . . INCHES	6	8	10	12	15	18	21
ENGINEER'S WRENCHES, BLACK . . . . . PER DOZEN	9.00	10.00	12.00	14.00	24.00	30.00	36.00
COES' WRENCHES, BLACK . . . . . PER DOZEN	9.00	10.00	12.00	14.00	24.00	30.00	36.00



L-142. ALLIGATOR WRENCH.



L-145. PEASE COMBINATION PLIERS.

ALLIGATOR WRENCH.—L-142.

NUMBER	1	2	3	4	5
HOLDS PIPE . . . . . INCHES	$\frac{1}{8}$ to $\frac{3}{8}$	$\frac{3}{8}$ to $\frac{3}{4}$	$\frac{1}{2}$ to $1\frac{1}{4}$	$1\frac{1}{4}$ to 2	2 to 3
PER DOZEN	4.00	12.00	24.00	36.00	54.00

PEASE COMBINATION PLIERS.—L-145.

SIZE . . . . . INCHES	6	10
NICKEL PLATED. GAS PLIER, WIRE CUTTER AND SCREW DRIVER COMBINED . . . . EACH	1.25	1.75



L-148. BÚRNER PLIERS, 5 AND 6-INCH.



L-150. GAS PLIERS, 7 TO 14-INCH.

BURNER AND GAS PLIERS.—L-148 and L-150.

SIZE . . . . . INCHES	5	6	7	8	9	10	12	14
PER DOZEN	6.00	8.00	7.40	8.25	9.25	10.70	13.00	17.00



L-154. ELGIN ADJUSTABLE WRENCH.

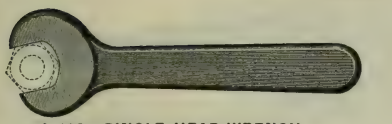


L-160. TRIMO HANDY POCKET WRENCH.

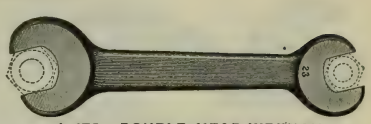
L-154. ELGIN ADJUSTABLE WRENCHES, 7 INCHES LONG, NICKEL PLATED . . . . . EACH	1.00
L-160. TRIMO HANDY POCKET WRENCH, WITH SCREW DRIVER AND GAS TIP CLEANER, NICKEL PLATED . EACH	2.50

We can furnish promptly any of the Nonpareil combinations, such as Socket Wrenches, Ratchet Drills and Ratchet Stud Drivers. Special Catalogue furnished upon application.

ENGINEERS' WRENCHES.



L-168. SINGLE-HEAD WRENCH



L-173. DOUBLE-HEAD WRENCH.

SINGLE-HEAD WRENCHES.—L-168.

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
SIZE BOLT FOR U. S. STANDARD NUT . . . INCHES	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2
OPENING, FINISHED . . . . . INCHES	5/16	13/32	1/2	19/32	11/16	25/32	7/8	31/32	1 1/16	1 1/4	1 7/16	1 5/8	1 13/16	2	2 3/16	2 3/8
EXTREME LENGTH . . . . . INCHES	2 1/2	2 3/8	3 3/4	4 3/4	5 3/8	6 1/2	7 1/2	8 3/8	9 1/4	11 1/8	13	14 1/8	16 5/8	18 1/2	20 1/4	22 1/4
THICKNESS OF HEAD . . . . . INCHES	3/16	3/16	1/4	5/16	5/16	3/8	13/64	7/16	31/64	9/16	21/32	3/4	51/64	25/32	53/64	1 1/16
SEMI-FINISHED . . . . . EACH	.12	.13	.15	.18	.21	.25	.30	.38	.48	.60	.75	.98	1.28	1.65	2.10	2.63
FINISHED . . . . . EACH	.16	.18	.20	.24	.28	.34	.40	.50	.64	.80	1.00	1.30	1.70	2.20	2.80	3.50

These Wrenches are adaptad for machine tools, locomotives, pumps, engines and general shop use. They will be milled to the Metric System, Whitworth Standard, or to special sizes, when required.

Each opening is at an angle of 15 degrees with the handle, which admits of turning a hexagon nut completely around, where the swing of the handle is limited to 30 degrees.

DOUBLE-HEAD WRENCHES.—L-173.

NUMBER	17	18	19	20	21	22	23	24	25	26	27
SIZE BOLT FOR U.S. S. NUT . IN.	1/8 & 3/16	1/8 & 1/4	3/16 & 1/4	3/16 & 5/16	1/4 & 5/16	1/4 & 3/8	5/16 & 3/8	5/16 & 7/16	3/8 & 7/16	3/8 & 1/2	7/16 & 1/2
OPENINGS, FINISHED . INCHES	5/16 & 13/32	5/16 & 1/2	13/32 & 1/2	13/32 & 17/32	1/2 & 19/32	1/2 & 11/16	19/32 & 11/16	19/32 & 25/32	11/16 & 35/64	11/16 & 7/8	25/32 & 7/8
EXTREME LENGTH . . INCHES	3 1/4	4	4	4 1/2	4 1/2	5 1/2	5 1/2	6 1/2	6 1/2	7 3/4	7 3/4
THICKNESS OF HEADS . INCHES	13/64 & 7/32	13/64 & 1/4	7/32 & 1/4	7/32 & 9/32	1/4 & 9/32	1/4 & 5/16	9/32 & 5/16	5/16 & 11/32	5/16 & 11/32	5/16 & 25/64	11/32 & 25/64
SEMI-FINISHED . . . EACH	.18	.21	.23	.25	.27	.30	.32	.35	.38	.42	.45
FINISHED . . . . . EACH	.24	.28	.30	.34	.36	.40	.42	.46	.50	.56	.60

NUMBER	28	29	30	31	32	33	34	35	36	37	------
SIZE BOLT FOR U.S. S. NUT . IN.	7/16 & 9/16	1/2 & 9/16	1/2 & 5/8	9/16 & 5/8	9/16 & 3/4	5/8 & 3/4	5/8 & 7/8	3/4 & 7/8	3/4 & 1	7/8 & 1	------
OPENINGS, FINISHED . INCHES	25/32 & 31/32	7/8 & 31/32	7/8 & 1 1/16	31/32 & 1 1/16	31/32 & 1 1/4	1 1/16 & 1 1/4	1 1/16 & 1 7/16	1 1/4 & 1 7/16	1 1/4 & 1 5/8	1 7/16 & 1 5/8	------
EXTREME LENGTH . . INCHES	8 3/4	8 3/4	9 3/4	9 3/4	11 5/8	11 5/8	13 1/2	13 1/2	15 1/2	15 1/2	------
THICKNESS OF HEADS . INCHES	11/32 & 7/16	25/64 & 7/16	25/64 & 31/64	7/16 & 31/64	7/16 & 9/16	31/64 & 9/16	31/64 & 21/32	9/16 & 21/32	9/16 & 3/4	21/32 & 3/4	------
SEMI-FINISHED . . . EACH	.51	.54	.61	.65	.75	.80	.93	.98	1.17	1.23	------
FINISHED . . . . . EACH	.68	.72	.82	.86	1.00	1.06	1.24	1.30	1.56	1.64	------

Wrenches Nos. 18 to 33 are carried in stock, milled to fit heads of standard hexagon head cap screws from 5/16 to 1-inch diameter, screw inclusive, in combinations appearing for nuts in above table. Details on application.



CONSTRUCTION WRENCHES.—L-180.

NUMBER	1	2	3	4	5	6	7
SIZE BOLT FOR U. S. STANDARD NUT . . . INCHES	3/8	1/2	9/16	5/8	3/4	7/8	1
OPENING, SEMI-FINISHED . . . . . INCHES	11/16	7/8	31/32	1 1/16	1 1/4	1 7/16	1 5/8
EXTREME LENGTH . . . . . INCHES	9	11 1/2	12 1/2	14	16	17 1/2	19
THICKNESS OF HEAD . . . . . INCHES	11/32	7/16	1/2	9/16	5/8	11/16	3/4
SEMI-FINISHED . . . . . EACH	.30	.48	.60	.75	97	1.28	1.65

When ordering, please state whether Semi-finished or Finished Wrenches are desired.

These Wrenches are for use in erecting bridges, iron-frame buildings, refrigerating apparatus, and for general construction service. The tang is for bringing bolt holes into line and for insertion into convenient openings when wrench is not in use, preventing loss and keeping tool in sight. The opening is at an angle of fifteen degrees with the handle, which admits of turning a hexagon nut completely around where the swing of the handle is limited to thirty degrees.



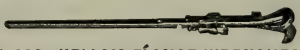
L-195. BEMIS AND CALL ADJUSTABLE WRENCH.

SIZE . . . . . INCHES	8	10	12	14
JAWS OPEN . . . . . INCHES	1	$1\frac{3}{8}$	$1\frac{5}{8}$	2
WEIGHT PER DOZ. . POUNDS	15	23	34	57
PRICE . . . . . PER DOZEN	9.00	12.00	15.00	21.00



L-198. BEMIS AND CALL WRENCH WITH LONG NUT.

SIZE . . . . . INCHES	10	12	15	18
ADJUSTABLE TO PIPE INCHES	$\frac{1}{4}$ to 1	$\frac{1}{2}$ to $1\frac{3}{4}$	$\frac{1}{2}$ to $2\frac{1}{4}$	$\frac{1}{2}$ to 3
WEIGHT PER DOZ. . POUNDS	26	40	55	87
PRICE . . . . . PER DOZEN	25.25	28.50	40.50	72.00



L-203. KELLAM FLANGE WRENCHES.



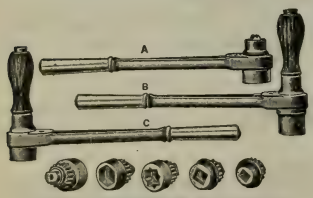
L-203. FRONT VIEW, IN USE.



L-203. REAR VIEW, IN USE.

KELLAM FLANGE WRENCHES.—L-203.

NUMBER	1	2	3
LENGTH OF LEVERS . . . . . INCHES	48	72	84
DIAMETER OF FLANGES THEY WILL TAKE . . . . . INCHES	4 to 10	8 to 16	14 to 26
WEIGHT . . . . . POUNDS	20	65	85
PRICE . . . . . EACH	15.00	25.00	40.00



L-207. LAG-SCREW WRENCH.

LAG-SCREW WRENCHES.—L-207.

NUMBER	1	2	3
LENGTH OF HANDLE . . . . INCHES	12	16	20
TAKE SQUARE NUTS, DIAM. . INCHES	$\frac{1}{2}$ to $1\frac{1}{4}$	$1\frac{1}{16}$ to $1\frac{1}{2}$	$1\frac{1}{4}$ to $1\frac{7}{8}$
TAKE HEXAGON NUTS, DIAM. INCHES	$\frac{7}{8}$ to $1\frac{1}{4}$	$1\frac{1}{16}$ to $1\frac{1}{2}$	$1\frac{1}{4}$ to $1\frac{7}{8}$
PRICE . . . . . EACH	2.50	3.50	5.50
EXTRA SOCKETS. . . . . EACH	.40	.75	1.00

Designed for turning coach screws, nuts or bolts, either way, without taking off the wrench.



L-211. OFFSET WRENCH.

TRIMO OFFSET WRENCHES.—L-211.

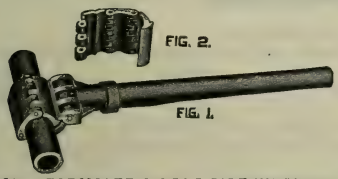
NUMBER	1	2	3
TAKE PIPE, SIZE . . INCHES	$\frac{1}{8}$ to $\frac{1}{4}$	$\frac{3}{8}$ to $\frac{3}{4}$	$\frac{1}{2}$ to 1
PRICE . . . . . EACH	1.00	2.00	3.00

Particularly adapted for all kinds of gas or electric fixtures where an insulator is used and on junction box work. Will not injure the insulators or the hard rubber covering. They can also be used for fittings next to the wall without injury to the plaster.



L-214. HALL BRASS PIPE WRENCH.

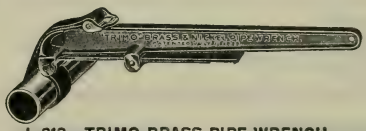
NO. 1 GRIPS, ¼, ⅜, ½, ¾, 1 IN. IRON SIZE PIPE, AND ⅝, ¾, ⅞, 1-IN. TUBING	EACH	7.50
NO. 2 GRIPS, 1¼, 1½, 1¾, 2-IN. TUBING	EACH	12.00
EXTRA BUSHINGS, NO. 1	EACH	.50
EXTRA BUSHINGS, NO. 2	EACH	1.00



L-217. PARMALEE GIRDLE PIPE WRENCH.

NUMBER	1	2
TAKES PIPE SIZE INCHES	¾ to 1¼	1½ to 3
STOCK ONLY EACH	2.00	2.50
GIRTH ONLY EACH	1.00	1.25

Does not slip; works like a Ratchet; will not crush or mar Brass Pipe.



L-219. TRIMO BRASS PIPE WRENCH.

NUMBER	1	2
TAKES PIPE INCHES	⅛ to 1	¾ to 2
PRICE EACH	2.25	3.00

Handles Brass Pipe without scratching or denting.

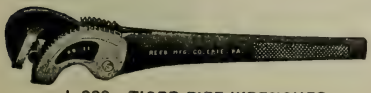


L-222. WESTCOTT ADJUSTABLE S WRENCH.



L-225. WESTCOTT ADJUSTABLE S PIPE WRENCH.

SIZE INCHES	6	8	10	12	14
L-222. CAPACITY OF OPENING INCHES	¾	1	1⅜	1⅝	2
PRICE EACH	.60	.75	1.00	1.25	1.75
L-225. TAKES PIPE FROM INCHES	⅛ to ⅜	⅛ to ¾	⅛ to 1	⅛ to 1¼	⅛ to 1½
PRICE EACH	1.00	1.25	1.50	2.00	2.50



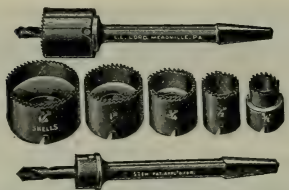
L-230. TIGER PIPE WRENCHES.

TIGER PIPE WRENCHES.—L-230.

AUTOMATIC ADJUSTMENT, DROP FORGE STEEL JAWS.

LENGTH, CLOSED INCHES	6	8	11	16	20
GRIPS PIPE INCHES	0 to ½	⅛ to ¾	⅛ to 1	⅜ to 1½	1 to 2
BLACK EACH	1.00	1.40	1.60	2.10	2.80
NICKEL EACH	1.30	1.80	2.25	2.90	3.50

FOR DRILLING STOVES FOR NATURAL GAS AND WATER BACK CONNECTIONS.



FOR DRILLING IRON BATH TUBS, SINKS, WASH TRAYS AND CAST-IRON PIPE.

L-236. COMBINATION SHELL DRILL

IRON PIPE, SIZE OF SHELLS . INCHES	⅜	½	¾	1	1¼	1½	2
SHELLS ONLY . . . . . EACH	1.75	1.75	2.25	2.50	2.75	3.00	4.00
STEM, WITH CENTER DRILL . . . . . EACH							.75



L-240. OSTER ADJUSTABLE TAP WRENCH.

NUMBER	1	2	3	4
LENGTH . . . . . INCHES	8	11	18	25
TAPS, DIAMETER . . . . . INCHES	1/16 to ½	¼ to ¾	½ to 1	¾ to 1½
EACH	1.50	2.00	3.50	5.50



L-246. PIPE TAP.



L-248. PIPE REAMER.



L-251. COMBINED TAP, REAMER AND DRILL.



L-253. FLAT DRILL.

SIZE	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
L-246. TAPS . . . . . EACH	1.12	1.25	1.50	1.87	2.50	3.12	3.75	4.62	6.25	10.50	15.00
L-248. REAMERS . . . . . EACH	1.12	1.25	1.50	1.87	2.50	3.12	3.75	4.62	6.25	10.50	15.00
L-251. COMBINED TAP, REAMER AND DRILL . EACH	....	2.50	2.50	3.00	4.50	6.00	7.25	8.50	10.75	....	....
L-253. DRILLS . . . . . EACH	....	....	1.00	1.25	1.50	1.75	2.00	2.50	....	....	....



L-258. TWIST DRILL, TAPER SHANK.



L-259. TWIST DRILL, ½-INCH SHANK.



L-262. TWIST DRILL, STRAIGHT SHANK.



L-263 BIT STOCK TWIST DRILL.



L-264. STRAIGHT FLUTED DRILL.

DRILLS

DIAMETER . . . . . INCHES	1/8	5/16	¼	7/16	⅜	9/16	½	5/8	11/16	¾	13/16	⅞	15/16	1
L-258 . . . . . EACH	.45	.50	.60	.70	.80	.90	1.00	1.20	1.40	1.60	1.85	2.15	2.45	2.75	3.00
L-259 . . . . . EACH	.45	.50	.60	.70	.75	.80	.85	.90	1.05	1.15	1.25	1.35	1.45	1.60	1.80
L-262 . . . . . EACH	.20	.29	.38	.48	.62	.75	.87	1.20	1.35	1.50	1.65	1.80	1.95	2.15	2.35
L-263 . . . . . EACH	.45	.50	.60	.70	.80	.90	1.00	1.20	1.40	1.60	1.85	2.15	2.45	2.75	3.00
L-264 . . . . . EACH	.13	.20	.28	.37	.48	.59	70	....	....	....	....	....	....	....	....



L-271. RATCHET SCREW-DRIVER, No. 1.

Length, inches,	2	3	4	5	6	8	10	12
Price, each,	.40	.45	.50	.55	.65	.75	.90	1.00

The Adjustment for Right or Left-hand is very simple.



L-273. RATCHET SCREW-DRIVER, No. 2.

Total Length - - - - - - inches, $5\frac{3}{4}$
Price - - - - - - - each, .60

Right and Left-hand and Rigid.



L-277. SPIRAL RATCHET SCREW-DRIVER.

Entire length, closed, with Bit in Chuck - inches, $13\frac{1}{2}$
Price - - - - - - - - - each, 2.00

Three Bits are included with each of the above Tools.



L-279. CHUCK WITH DRILL POINTS FOR L-277.

Size of Drills, inches $\frac{1}{16}$ $\frac{5}{64}$ $\frac{3}{32}$ $\frac{7}{64}$ $\frac{1}{8}$ $\frac{9}{64}$ $\frac{5}{32}$ $\frac{11}{64}$
Price, with 8 Drills - - - - - .65



L-282. RECIPROCATING DRILL.

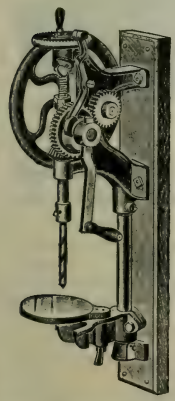
Length, without Drill - - - - - inches, 16
Traverse - - - - - - - - inches, $8\frac{1}{2}$
Price - - - - - - - - each, 2.80



L.-284. PLAIN SCREW-DRIVER.

Length, inches,	4	5	6	8	10	12
Price, each,	.13	.15	.17	.23	.35	40

L-282 Reciprocating Drill runs continuously to the right during both the forward and backward movements of the driver. No Drill Points are furnished with the Tool. The Chuck will hold any drill with Shank $\frac{3}{16}$ inch diameter or less



L-289. UPRIGHT DRILL, No. 1.

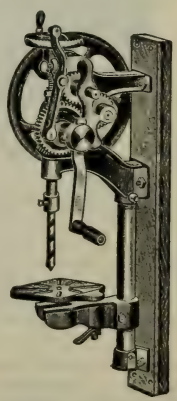
UPRIGHT DRILLS.

The spindles in these Drills are made of steel and to receive $\frac{1}{2}$-inch straight shank bits.

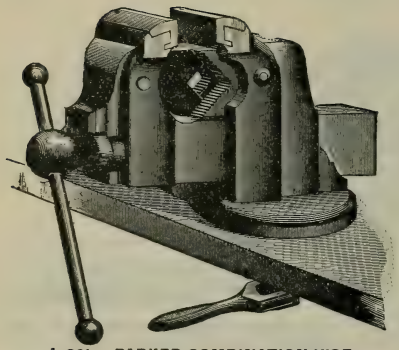
The self-feeds may be used or not, as desired, by simply moving the dog, and can easily be changed to feed slow or fast.

The speed may be varied by changing the crank from one shaft to another, which is quickly done.

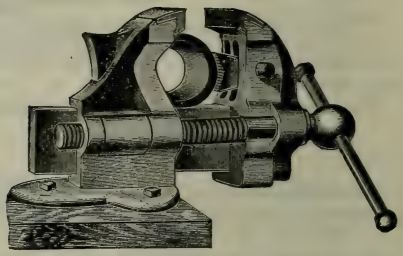
NUMBER	1	2
WILL DRILL HOLES . . . . . INCHES	0 to 1	0 to $1\frac{1}{4}$
TO CENTER OF CIRCLE . . . . . INCHES	14	15
SPINDLE TRAVELS . . . . . INCHES	3	$3\frac{1}{2}$
PRICE . . . . . EACH	8.00	11.00



L-291. UPRIGHT DRILL, No. 2.



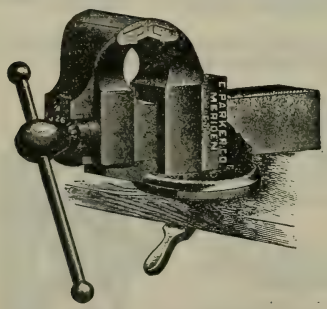
L-301. PARKER COMBINATION VISE.



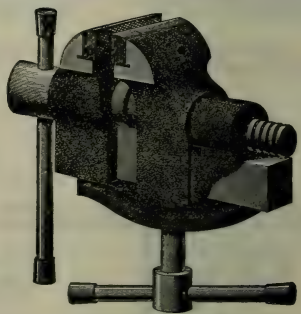
L-304. PARKER HOLD-FAST COMBINATION VISE.

PARKER COMBINATION VISES.—L-301 and L-304.

NUMBER	1	2	3	4
HOLDS PIPE FROM . . . INCHES	⅛ to 2	⅛ to 3	⅛ to 4	⅛ to 6
WEIGHT . . . POUNDS	41	59	94	141
L-301. . . . EACH	16.00	20.00	28.00	35.00
L-301. PIPE JAWS . . . NET, PER SET	1.75	2.00	2.50	3.00
L-301. PLAIN JAWS . . . NET, EACH	.50	.50	.50	.75
L-304. HOLDS PIPE FROM . . . INCHES			⅛ to 2	⅛ to 3
L-304. . . . EACH			8.50	11.00



L-308. PARKER HEAVY RAILWAY VISE.



L-311. BENCH VISE, 5-INCH JAW.

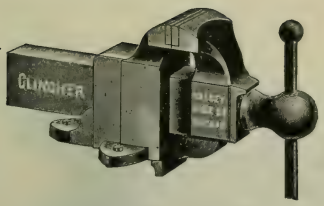
PARKER HEAVY RAILWAY VISE.—L-308.

LENGTH OF JAWS 8⅛ INCHES; WEIGHT, 250 LBS.; OPENS 12½ INCHES . . . EACH	55.00

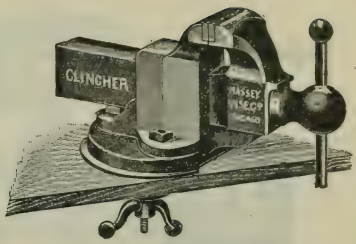
This Vise is recommended for use in Railway and Machine Shops, being especially strong and durable. Practical tests have occasioned its adoption by many of the leading Railroad Companies.

BENCH VISES.—L-311.

FOR PIPE ⅛ TO 6 INCHES . . . EACH	18.00
EXTRA JAWS . . . PER PAIR	2.25



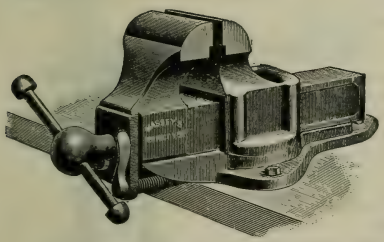
L-317. FLAT BOTTOM.



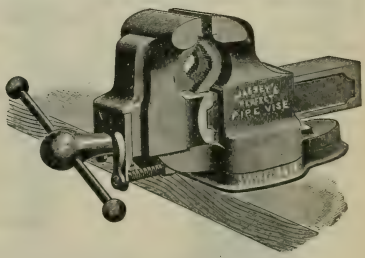
L-319. SWIVEL BOTTOM.

MASSEY CLINCHER VISES.—L-317 and L-319

NUMBER	1	2	3	4	5	6	7
SIZE OF JAW . . . . . INCHES	3¼	3⅝	4⅛	4⅝	5	5⅝	6
OPENS . . . . . INCHES	4	5	5½	6½	7	8½	9½
WEIGHT . . . . . POUNDS	28	36	52	64	85	110	150
L-317. FLAT BOTTOM . . . . . EACH	6.00	7.00	8.50	10.00	13.00	17.50	25.00
L-319. SWIVEL BOTTOM . . . . . EACH	7.50	8.75	10.50	12.50	16.00	21.00	30.00



L-323. STATIONARY BASE.



L-325. PIPE VISE.

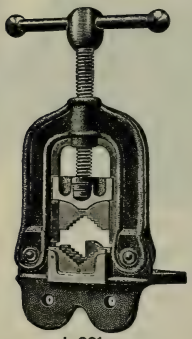
MASSEY PERFECT VISES.—L-323.

NUMBER	1	2	3	4	5
SIZE OF JAWS . . . . . INCHES	3½	4	4¾	5½	6¼
OPENS . . . . . INCHES	4	5½	6	8	9
WEIGHT . . . . . POUNDS	40	50	78	118	150
L-323. STATIONARY BASE . . . . . EACH	7.75	9.50	11.50	17.50	23.00
SWIVEL BASE (NOT ILLUSTRATED) . . . . . EACH	8.75	10.50	12.50	19.50	25.00

MASSEY PERFECT PIPE VISES.—L-325

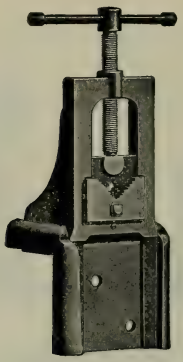
NUMBER	6	7
SIZE OF JAWS . . . . . INCHES	3½	4½
HOLDS PIPE . . . . . INCHES	⅛ to 2	⅛ to 3
WEIGHT . . . . . POUNDS	47	70
PRICE . . . . . EACH	16.00	20.00

The loose Jaw can be slipped out, the Pipe dropped between the Pipe Jaws, and fastened instantly.



L-331.
MALLEABLE VISE.

NUMBER	1	2
HOLDS PIPE - INCHES	⅛ to 2	⅛ to 3
EACH	10.00	14.00
EXTRA JAWS SET OF 3	1.00	1.50



L-333.
ANGLE PLATE VISE.

NUMBER	1	2
HOLDS PIPE - INCHES	⅛ to 2	⅛ to 3
EACH	12.00	18.00



L-335.
KLINGFAST VISE.

HOLDS PIPE - - - - INCHES	⅛ to 2
EACH	3.00



L-341.
ARMSTRONG VISE.

ARMSTRONG VISES.—L-341.

HOLDS PIPE - - - - INCHES	⅛ to 2½	½ to 4½
EACH	10.00	20.00

CLOW ROLLER VISES.—L-345.

MALLEABLE IRON.

HOLDS PIPE - - - - - - - - - INCHES	⅛ to 2
EACH - - - - - - - - - - - - NET	3.00



L-345.
CLOW ROLLER VISE.



L-349. U. S. ANVIL, WROUGHT IRON, STEEL FACE.

50 TO 500 POUNDS - - - - - - - - - PER LB.	-----



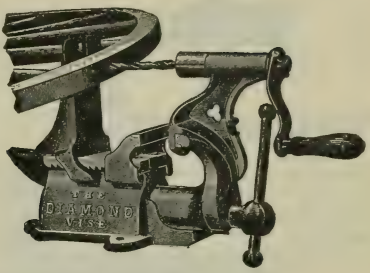
L-351. ENTERPRISE ANVIL.
SIZE OF FACE, 3X5 INCHES.

EACH -	1.00

Hardie, extra, 40 cents.



L-366. DIAMOND VISE.

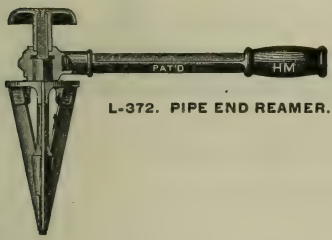


L-369. DIAMOND VISE, WITH DRILL ATTACHMENT.

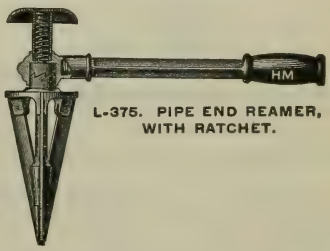
DIAMOND VISES.—L-366 and L-369.

VISE ONLY	EACH	4.50
VISE WITH DRILL ATTACHMENT	EACH	7.50

Anvil face 3 x 7, polished and hardened.
To hold pipe, move small jaw back one notch. Three sharp jaws, 4 inches long, clamp pipe up to 2 inches.



L-372. PIPE END REAMER.



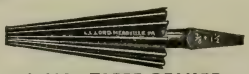
L-375. PIPE END REAMER, WITH RATCHET.

PIPE END REAMERS.—L-372 and L-375.

L-372	EACH	5.00

L-375	EACH	7.00

A simple and durable Tool for removing Burrs from the ends of Wrought Iron and Steel Pipe from $\frac{3}{8}$ to 3-inch inclusive. With this tool the burr is entirely removed and not spread.



L-380. TAPER REAMER.

NUMBER	1	2	3	4	5
SIZE INCHES	$\frac{1}{4}$ to $\frac{7}{8}$	$\frac{1}{4}$ to $1\frac{3}{8}$	$\frac{3}{8}$ to $1\frac{1}{2}$	$\frac{1}{2}$ to $1\frac{3}{4}$	$\frac{1}{2}$ to 2
TAPERS INCHES	$\frac{5}{8}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$
REAMS INCHES	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{4}$ to $\frac{3}{4}$	$\frac{3}{8}$ to 1	$\frac{1}{2}$ to $1\frac{1}{4}$	$\frac{1}{2}$ to $1\frac{1}{2}$
EACH	3.00	3.50	4.50	5.50	6.50

These Taper Reamers are used for making true, smooth holes in enameled Bath Tubs, etc., etc.



L-386.
BALL PEIN HAMMER.



L-388.
DOUBLE FACE ENGINEERS' HAMMER.

MACHINISTS' HAMMERS, BALL PEIN.—L-386.

WEIGHT	8 oz.	12 oz.	1 lb.	1 lb. 4 oz.	1 lb. 8 oz.	2 lb.	2 lb. 8 oz.	3 lb.
PER DOZEN	12.00	12.00	12.50	13.50	14.50	16.50	19.00	22.00

ENGINEERS' HAMMERS, DOUBLE FACE.—L-388.

WEIGHT	1 lb. 8 oz.	2 lb. 6 oz.	3 lb.	3 lb. 10 oz.
PER DOZEN	14.50	16.50	18.00	19.50



L-393. ENGINEERS' HAMMER.



L-396. RIVETING HAMMER.

ENGINEERS' HAMMERS.—L-393.

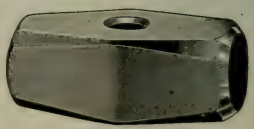
WEIGHT	1 lb. 2 oz.	1 lb. 10 oz.	2 lb.	2 lb. 8 oz.	3 lb.	3 lb. 8 oz.	4 lb. 8 oz.
PER DOZEN	12.00	13.00	14.00	15.00	16.00	17.00	19.00

RIVETING HAMMERS, ADZE EYE.—L-396.

WEIGHT	6 oz.	9 oz.	12 oz.	1 lb.	1 lb. 4 oz.
PER DOZEN	7.00	7.50	8.00	8.50	9.00



L-399. NAIL HAMMER.



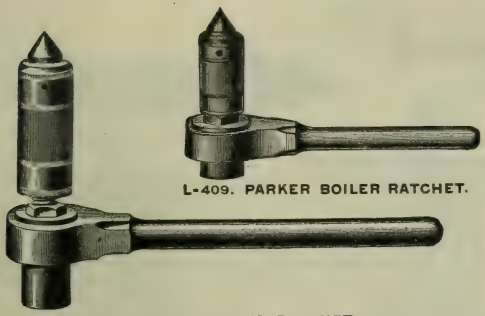
L-401. SLEDGE.

NAIL HAMMERS, ADZE EYE.—L-399.

WEIGHT	13 oz.	1 lb.	1 lb. 4 oz.
NICKEL PLATED PER DOZEN	13.00	13.50	14.00

SLEDGES.—L-401.

WEIGHT	4 lb.	6 lb.	8 lb.	10 lb.
EACH	1.20	1.80	2.40	3.00

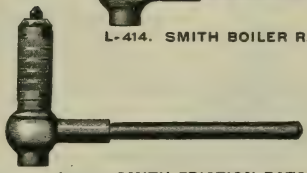


L-409. PARKER BOILER RATCHET.

L-407. PARKER RATCHET.



L-414. SMITH BOILER RATCHET.



L-412. SMITH FRICTION RATCHET.

RATCHETS.

NUMBER	1	2	3	4	5
LENGTH OF HANDLE . . . INCHES	10	12	15	17	20
L-407. . . . EACH	5.75	6.00	7.00	7.50	8.00
L-409. . . . EACH	5.50	6.00	-----	----	-----
L-412. . . . EACH	10.00	12.00	15.00	----	23.00
L-414. . . . EACH	9.00	10.50	13.50	----	-----



L-418. LOWELL RATCHET WRENCH.



L-421. GAS FITTERS' AUGER.

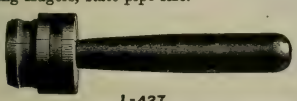
LOWELL RATCHET WRENCHES.—L-418.

NUMBER	1	2	3	4
SIZE OF SQUARE GEAR . . . INCHES	$\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$	$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$	$\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$	$1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$
SIZE OF HEXAGON GEAR . . . INCHES	$\frac{5}{8}$, $\frac{3}{4}$,	$\frac{3}{4}$, $\frac{7}{8}$, 1	1, $1\frac{1}{8}$, $1\frac{1}{4}$	$1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$
WITH ONE GEAR ONLY . . . EACH	4.25	5.50	7.00	9.75
EXTRA GEARS . . . EACH	.70	.85	1.05	1.40

GAS FITTERS' AUGERS.—L-421.

NUMBER	1	2	3	4	5	6	7	8	9
DIAMETER OF AUGER . . . INCHES	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	3
SIZE OF PIPE . . . INCHES	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$
EACH . . .	1.10	1.25	1.45	2.10	2.45	3.00	3.40	4.20	5.00

In ordering Augers, state pipe size.



L-427.
PROSSER'S SPRING TUBE EXPANDER.



L-429.
HENDERER ROLLER TUBE EXPANDER.

SIZE. . . INCHES	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	5	6
L-427 . . . EACH	8.00	8.00	9.00	11.00	12.00	13.00	15.00	18.00	22.00	26.00	30.00	-----	33.00	42.00	60.00
L-429 . . . EACH	10.00	10.00	10.00	10.00	10.00	12.00	14.00	16.00	18.00	20.00	23.00	25.00	30.00	-----	-----



L-438. RED JACKET FLUE CLEANER.



L-442. ENGINEERS' FAVORITE.

RED JACKET STEAM FLUE CLEANERS.—L-438.

NUMBER	0	1	2	3	4	5	6
SIZE OF TUBES, OUTSIDE DIAMETER INCHES	1¼ to 1¾	2 to 2¼	2½ to 2¾	3 to 3¼	3½ to 3¾	4 to 4½	5 to 6
WITH CLAMPS AND NIPPLE EACH	5.00	5.00	6.25	7.50	8.75	10.00	12.50
BEST 4-PLY STEAM HOSE PER FOOT	½-in. .51	½-in. .51	¾-in. .67	1-in. .83	1-in. .83	1¼-in. 1.04	1¼-in. 1.04

The above prices do not include hose.

ENGINEERS' FAVORITE CLEANERS.—L-442.

SIZE INCHES	1½	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	6
EACH	2.00	2.00	2.25	2.50	2.75	3.00	3.25	3.50	4.00	4.50	6.25	7.50



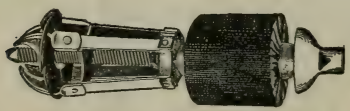
L-446. STEEL WIRE TUBE CLEANER.



L-449. EXPANDING WIRE FLUE BRUSH.

STEEL WIRE TUBE CLEANERS.—L-446 and L-449.

SIZE INCHES	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4
L-446. TINNED EACH	----	1.45	1.55	1.70	1.90	2.10	2.30	2.50	2.80	3.00	3.30	----	3.75
L-449. EACH	----	----	2.00	2.00	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00



L-452. PILLEY FLUE BRUSH.



L-454. RUGGLES FLUE AUGER.

PILLEY COMBINATION FLUE BRUSH AND SCRAPER.—L-452.

DIAMETER INCHES	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	6
EACH	2.00	2.25	2.50	2.75	3.00	3.25	3.50	4.00	4.50	5.00	6.00

RUGGLES FLUE AUGERS.—L-454.

FOR FLUES, DIAMETER INCHES	1 to 3	3½	4	4½ to 5
EACH	5.00	6.00	7.00	10.00

Wire Cable Handle, with Fittings, each, 3.50; Flexible Links for Stiff Rods, each, 1.50; Knives, per set, 2.00.

Adjustable to all imperfections of Flues and reaches all spots in Flue, whether convex, concave, flat or thimbled. Cleans hot or cold flues without losing temper.

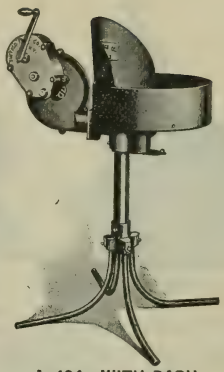
BUFFALO FORGES.



L-460. WITH DASH.



L-462. HALF OPEN HOOD.

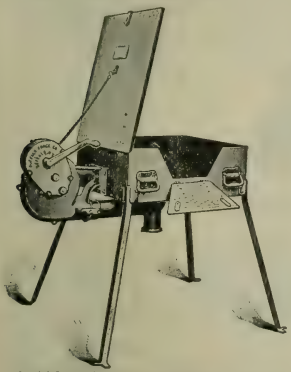


L-464. WITH DASH.

BUFFALO FORGES.—L-460, L-462 and L-464.

STYLE	L-460	L-462	L-464
HEIGHT . . . . . INCHES	33	33	44
DIAMETER OF HEARTH . . . . . INCHES	18	18	18
WEIGHT . . . . . POUNDS	75	80	115
PRICE . . . . . EACH	24.00	27.00	35.00

L-464 has the Gears, Fan Case, Bowl, Standard and Legs detachable.



L-468. ARMY AND NAVY FORGE.



L-468. READY FOR SHIPMENT.

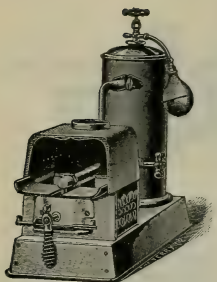


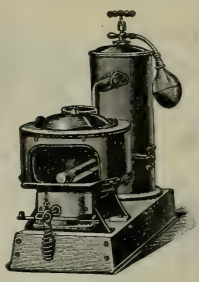
L-470. BELLOWS FORGE.

HEIGHT TO FIRE . . . . . INCHES	31
HEIGHT TO TOP OF CASE . . . . . INCHES	37
DIAMETER OF FAN . . . . . INCHES	12
WEIGHT . . . . . POUNDS	164
EACH	75.00

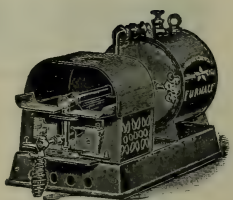
DIAMETER OF HEARTH . . . . . INCHES	19½
HEIGHT . . . . . INCHES	37
WEIGHT . . . . . POUNDS	145
EACH	30.00

L-468. READY FOR SHIPMENT. Shows the Army and Navy Forge with Blower, Gearing, Legs, Tuyere, etc., detached and enclosed in the case. Dimensions of Case, closed, are 22½x27¼x10 inches.


L-478. No. 3.


L-482. No. 4.


L-486. No. 5.

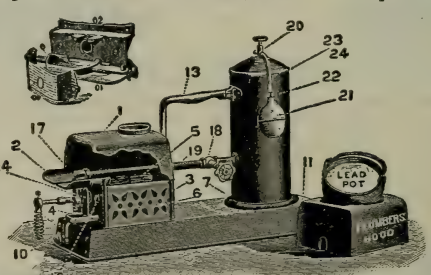

L-494. STAR.

BURGESS GEM GASOLINE FURNACES.

STYLE	No. 3 Air Pump and Filling Plug or Rubber Bulb	No. 4 Improved Generator and Drip Cup	No. 5 Improved Generator and Drip Cup	No. 6 Improved Generator and Drip Cup	No. 7 Improved Generator and Drip Cup	No. 8 Improved Generator and Drip Cup	L-494. Star Automatic Air Pump and Brass Filler Plug
SIZE OF BURNER . INCHES	4	3	3	4	4	4	4
WEIGHT . . . POUNDS	15	15	14	15	15	17	11
WITH TIN RESERVOIR, EACH	7.00	7.00	7.00	7.50	7.00	8.00	5.50
WITH COPPER RES'R, EACH	8.50	8.50	8.50	9.00	8.50	10.00	----

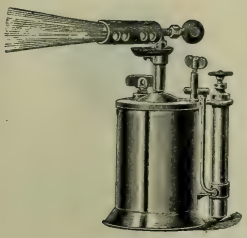
By removing top cover, metal pots can be used on Nos. 4, 5, 6, 7 and 8. Descriptive catalogue sent upon application.

REPAIR PARTS FOR GASOLINE FURNACES.



00 Chimney, 10
0 Drip Cup, 40
01 Supporting Bottom, 15
02 Bracket, 15
80

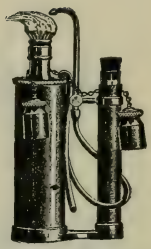
No.	DESCRIPTION	Price
1	HOOD, part that covers the soldering coppers . . . EACH	.60
2	FRONT RESTING PLATE, part that soldering coppers rest on . . . EACH	.45
3	BACK RESTING PLATE, part that points of soldering coppers rest on . . . EACH	.30
4	DRIP CUP, part that holds the oil for heating generator valve in starting . . . EACH	.30
5	CYLINDER OR SLOTTED BURNER, cylindrical slotted part that supplies the flame, $5\frac{3}{16}$ long . . . EACH	1.15
6	SIDE PIECES, parts supporting furnace and protecting flame . . . PER PAIR	.25
7	RING, iron part around bottom of reservoir, attached to base . . . EACH	.15
10	SLIDE ROD, part that drip cup slides on . . . EACH	.10
11	STEEL BASE, part that furnace and reservoir rest on . . . EACH	.75
13	HANDLE, malleable iron to support reservoir and carry furnace . . . EACH	.30
14	MIXING TUBE, conveys gas from needle point to mixing chamber . . . EACH	.15
16	BOLTS, for bolting front and back resting plates together. Length, $6\frac{1}{4}$ inches . . . PER PAIR	.15
17	GENERATOR VALVE, valve that regulates and generates the gas . . . EACH	1.15
18	OIL FAUCET, valve that goes between furnace and reservoir . . . EACH	.90
19	GENERATING PIPE, pipe that fits in furnace over slotted burner . . . EACH	.75
20	AIR FAUCET, brass casting that screws on top of reservoir . . . EACH	1.15
21	PATENT RUBBER BULB AND TUBE, part fitting on tube of air faucet for supplying pressure . . . EACH	.90
22	RUBBER VALVE, part that works in metal coupling of bulb . . . PER PAIR	.10
23	TIN RESERVOIR, tank that holds the gasoline. These prices include air faucet and pipes, excluding rubber bulb, ready to fit oil faucet . . . EACH	3.75
24	COPPER RESERVOIR . . EACH 5.25 | PLUMBER'S LEAD POT . EACH 75 | PLUMBER'S HOOD . . . EACH	.75



L-502. GASOLINE TORCH.



L-505. NEEDLE FLAME TORCH.



L-507. ALCOHOL TORCH.

GASOLINE AND ALCOHOL TORCHES.

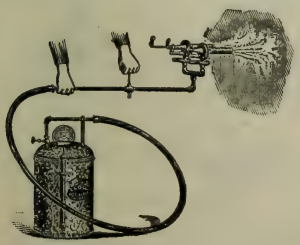
L-502. STANDARD BLOW PIPE OR TORCH	EACH	5.00
L-505. NEEDLE FLAME TORCH (WILL GENERATE 3,500 DEGREES OF HEAT, WHICH IS 50 PER CENT. MORE THAN ANY OTHER TORCH CAN PRODUCE)	EACH	8.00
L-507. COMBINATION SOLDERING TORCH FOR ALCOHOL	EACH	3.00

Descriptive circular of L-505 and L-507 sent upon application.

PARTS FOR GASOLINE TORCH.—L-502.

BURNERS, COMPLETE	EACH	1.75	BURNER HEADS	EACH	.50
AIR PUMPS	EACH	1.25	DRIP CUPS	EACH	.25
BURNERS WITHOUT HEAD	EACH	1.25	NEEDLE SCREWS	EACH	.40
AIR VALVES	EACH	.75	FILLER PLUGS	EACH	.50

RAILWAY HOT-BLAST PAINT BURNER, FOR GASOLINE OR KEROSENE.



L-514. PAINT BURNER.

The best machine ever made for burning off paint from coaches, box cars, street cars, boats, etc. In use by Swift & Co., Armour Car Lines, Lipton Car Lines, and many others. Will do the work of seven men with small burners. Safe, economical and portable. The burner is attached to an iron pipe with handle; length of pipe, three feet. Will pay for itself in one month's time, saving in cost of oil and time. All parts interchangeable.

HOT BLAST PAINT BURNERS.—L-514.

BURNER WITHOUT HOSE, GASOLINE	EACH	40.00
BURNER WITHOUT HOSE, KEROSENE	EACH	44.00
SPECIAL OIL HOSE	PER FOOT	.75



L-520. STANDARD PLUMBERS' FURNACE.

Each . . . 6.00



L-522. THAWING STEAMER.

To go into Plumbers' Furnace instead of Solder Pot.

Each, 7.00 Hose, extra, per ft., .09



L-528. HOT BLAST TORCH.

Each 2.50

Extra Burners, each . 1.50

L-528. Hot Blast Torch, for contractors' use and general out-of-door night work, produces a white illuminating flame. It is also largely used by railroads and street railways, etc. It is not affected by wind or rain, and burns ten hours for each filling. Cost of lighting is one cent an hour. The Valves have wheel handles, and conductor pipe extends through top of Tank, an important feature which materially lengthens the life of the Torch.



L-532. SHIELD.



L-534. HANDLE.



L-536. COIL CAGE.



L-538. TOP PLATE.



L-540. COIL.



L-543. VALVE.



L-545. BRASS NUT FOR COIL CUP.



L-547. BRASS NUT FOR ROD.

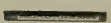
L-549. BRASS.



L-550. FILLER PLUG.



L-552. AIR VALVE.



L-555. CONNECTING PIPE.



L-558. TEE.



L-560. ELL



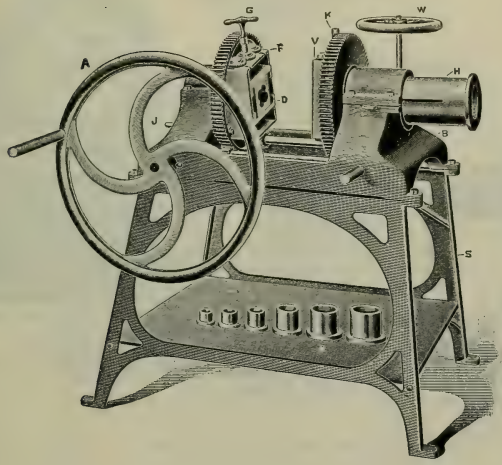
L-562. RUBBER BULB.

PARTS OF JEWEL GASOLINE FURNACE.

FIGURE . . .	L-532	L-534	L-536	L-538	L-540	L-543	L-545	L-547	L-549	L-550	L-552	L-555	L-558	L-560	L-562
EACH	.35	.15	.25	.15	.25	.30	.01	.01	.10	.10	.25	.08	.04	.04	.30

CLOW PORTABLE PIPE MACHINE.

FOR CUTTING AND THREADING.



L-570.

The Clow Portable Pipe Machine cuts Pipe from ⅜ to 4-inch, easily, quickly and without a burr.

It also threads a true, sharp, clear thread.

It will take any ordinary Solid Die and may be operated by hand or by power.

The Base and large Gears are gray iron castings. The Gear Cogs are cut, not cast, producing a smooth, even motion. The Driving Spur Gears on the two shafts are of steel.

A three-wheel Cutter is back of the Die, the latter being removed when Pipe is to be cut.

When Pipe is to be threaded, a Die of the size required, from 1 to 3-inch, is inserted in the frame [F] and the Pipe fed up to it. The Slow Motion Gear is used for cutting 2½ to 3-inch Pipe. The Fast Motion may be used for Pipe 2 inches and smaller. By use of the Double Motion by two men, if by hand power, greater speed may be attained.

The maximum space between Vise and Die Frame is 8 inches, this being the length of the longest continuous thread at one cut—that is, without readjusting. Should a longer thread be desired, when 8 inches have been cut, release the Vise and feed it back as far as it will go. Then tighten the Vise and operate as before, when another 8 inches may be cut, and so on.

Bushings, shown at [R], are furnished with each Machine to keep long lengths of Pipe well centered in the Barrel [H]. The Bushings and Dies may be kept on the shelf when a Bench is used with the Machine.

If operated by hand, the large wheel [A] is used for Single Motion. If greater speed is desired, a second man may operate an extra crank attached to the small shaft at the back of the Machine, at the opposite end from the wheel shaft, producing double motion. Either the wheel or the second crank may be attached to any of the shafts.

If operated by belt power, the Pulley should be attached to the small shaft in place of the wheel. Belt power connections are usually made at the Slow Motion Gear, as the Slow Motion is more favorably regarded by machinists for cutting a uniform, even thread.

The Standard or Bench illustrated is specially made for this machine and is a secure, convenient support. The Shelf adds strength and is very convenient.

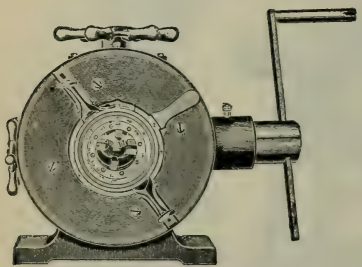
PRICES.

MACHINE AND COMPLETE SET RIGHT HAND DIES, 1 TO 4-INCH, SET OF BUSHINGS, EXTRA CRANK FOR DOUBLE MOTION, AND *OILER	125.00
BENCH, EXTRA	10.00

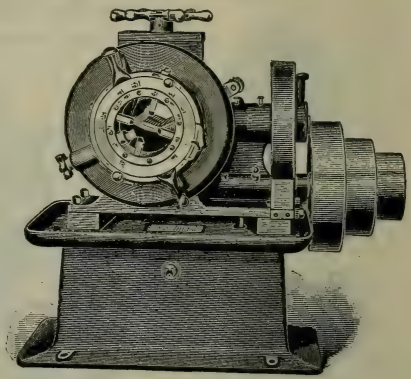
*An Oil Cup with Cock, for oiling Die, will be supplied if requested. Otherwise a Hand Oiler will be furnished:

Send for Special Circular describing operation in detail.

OSTER PIPE CUTTING AND THREADING MACHINES.



L-575. OSTER HAND PIPE MACHINE.



L-577. OSTER POWER PIPE MACHINE.

OSTER HAND PIPE THREADING MACHINES.—L-575.

THREADING PIPE	INCHES	⅛ to 2
HAND MACHINE	EACH	60.00
POWER MACHINE, WITH COUNTERSHAFT	EACH	100.00
OIL RESERVOIR	EACH	3.00
EXTRA DIES	PER SET OF FOUR PIECES	3.00
WEIGHT OF MACHINE	POUNDS	185

The Oster Pipe Machine, as shown in L-575, consists of Patent Expanding Die Head graduated on the face plate, Patent Adjustable Positive Stop, for accurate duplicates, and Dies adjustable to variations in Fittings. The Vise centers pipe perfectly, insuring straight threads. Pipe is drawn up to the Dies by hand wheel, rack and pinion. Every piece guaranteed perfectly made and of best material. This machine has no cutting-off attachment.

OSTER POWER PIPE CUTTING AND THREADING MACHINES.—L-577.

THREADING AND CUTTING PIPE	INCHES	2½ to 6	1½ to 6	1 to 6
RIGHT HAND DIES	SETS	4	5	6
COMPLETE	EACH	390.00	395.00	400.00
EXTRA DIES, RIGHT OR LEFT	PER SET OF FOUR PIECES	5.00	5.00	5.00

Weight of Oster Pipe Cutting and Threading Machines, L-577, 1400 pounds; floor space, 36½x16 inches; Pulleys on Counter, 16x4 inches; speed of Counter, 120 revolutions. The Oster Expanding Die Head can be opened while in motion. Dies are removable outward, through the shell. The Cam Plate, for controlling Dies, is operated by convenient handles. Patent Positive Stop on the face plate for duplication of sizes.

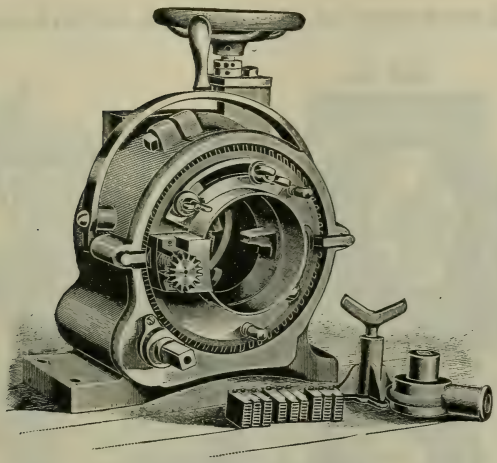
These Machines are set on a heavy base so as to bring the center of the pipe thirty inches above the floor. Base contains an oil tank. A ratchet attachment is permanently fixed on the driving shaft, and can be used to operate the machine by hand when desired. Cutting-off attachment is of the lathe tool pattern, substantially imbedded in the head; it is automatically fed by means of the star wheel feed, so simple that mistakes cannot occur and breaking the tool is avoided; the feed is constant and positive. This attachment will cut 6-inch pipe in less than four minutes, leaving it without burr and the blade in good condition. The Vise is self-centering and insures straight threads. It is operated by hand wheel to draw the pipe up to the dies. The jaws are hardened tool steel.

Each machine is equipped with a pump, which lifts the oil from the tank in the base and floods the dies. No extra belt is necessary, as the pump is driven by a small pinion engaged in the spur gear which drives the machine. This is an important feature. All gears are carefully guarded and no chips can affect the running part.

No. 3 OSTER PIPE CUTTING AND THREADING MACHINES. (Not Illustrated.)

THREADING PIPE	INCHES	1 to 4
FOR HAND POWER, WITH AUTOMATIC CUT-OFF	EACH	125.00
FOR BELT POWER, WITH AUTOMATIC CUT-OFF	EACH	260.00
OIL RESERVOIR	EACH	3.00
EXTRA DIES, RIGHT OR LEFT	PER SET	4.00

The Hand Power Machine, L-3, is similar in appearance to L-575, with addition of Cast Iron Tray to collect chips and oil. It is operated by Crank on the small sizes and by Ratchet Lever on the large sizes. The Belt Power Machine, L-3, is similar in appearance to L-577.



L-585. FORBES HAND MACHINE.

FORBES HAND MACHINES.

No.	Range.	Gross Weight. Pounds.	Price.
*30	¼ to 2 in., both Right and Left.	178	50.00
*32	¼ to 2 in. for Solid Dies (without dies)	170	45.00
*34	1 to 3 in., R. H., 1 to 2 in. L. H.	195	75.00
*36	¾ to 3 in., R. H., ¾ to 2 in. L. H.	200	85.00
*37	¼ to 3 inches, R. and L.	200	105.00
†46	2½ to 4 inches, R. H.	270	85.00
*38	1½ to 4 inches, R. H.	272	100.00
*40	1½ to 4 inches, R. and L.	275	115.00
*42	1 to 4 inches, R. H.	273	110.00
*44	1 to 4 inches, R. and L.	285	130.00
†50	4 to 6 inches, R. H.	376	115.00
†52	3½ to 6 inches, R. H.	376	130.00
†54	2½ to 5 inches, R. H.	378	150.00
†56	2½ to 6 inches, R. H.	381	175.00
†62	2½ to 6 inches, R. H. (extra heavy)	885	300.00
*58	1 to 6 inches, R. H.	408	190.00
*60	1 to 6 inches, R. and L.	426	235.00
*63	2½ to 8 inches, R. and L.	750	360.00
†64	2½ to 8 inches, R. H.	725	325.00
†66	2½ to 10 inches, R. H.	880	500.00
*67	2½ to 10 inches, R. H.	890	500.00
*68	2½ to 10 inches, R. and L.	950	550.00

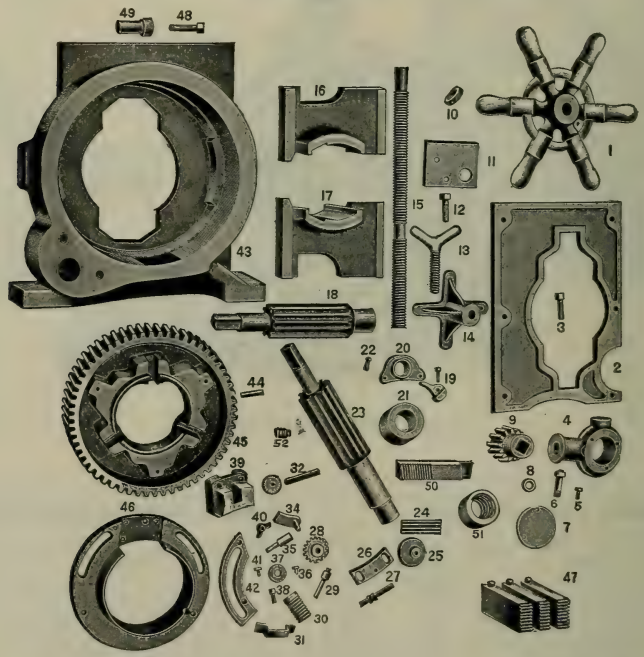
*Pressure feed machine. †Lead screw machine.
Nos. 30 to 37 have no cut-off attachment.

FORBES HAND OR POWER MACHINES.

No.	Range.	Gross Weight. Pounds.	Price.
*70	¼ to 2 inches, R. and L.	430	100.00
*72	¼ to 2 in. for Solid Dies (without dies)	425	95.00
*74	1 to 3 in. R. H., 1 to 2 in. L. H.	459	125.00
*76	¾ to 3 in. R. H., ¾ to 2 in. L. H.	462	135.00
*77	¼ to 3 inches, R. and L.	467	155.00
†78	2½ to 4 inches, R. H.	652	140.00
*80	1½ to 4 inches, R. H.	653	150.00
*82	1½ to 4 inches, R. and L.	654	165.00
*84	1 to 4 inches, R. H.	653	160.00
*86	1 to 4 inches, R. and L.	664	180.00
†88	4 to 6 inches, R. H.	813	170.00
†90	3½ to 6 inches, R. H.	818	180.00
†92	2½ to 5 inches, R. H.	818	200.00
†94	2½ to 6 inches, R. H.	823	225.00
*96	1 to 6 inches, R. H.	843	250.00
*98	1 to 6 inches, R. and L.	853	285.00
*99	2½ to 8 inches, R. and L.	1215	535.00
†100	2½ to 8 inches, R. H.	1193	500.00
†102	2½ to 10 inches, R. H.	1600	700.00
*104	2½ to 10 inches, R. H.	1600	700.00
*106	2½ to 10 inches, R. and L.	1650	750.00

*Pressure feed machine. †Lead screw machine.
These prices include counter-shaft, ratchet wrench and pipe rest. Nos. 70 to 77 have no cut-off attachment.

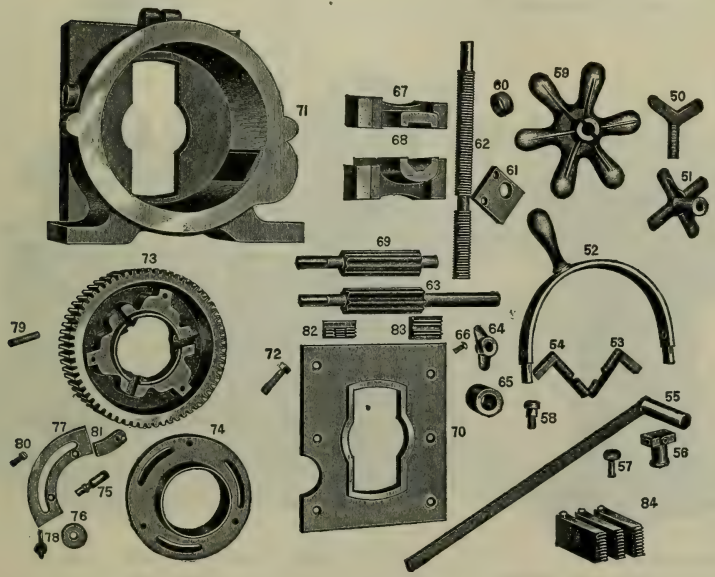
NAMES OF PARTS OF THE FORBES PATENT DIE STOCKS.



1. Hand Wheel.
2. Back Plate.
3. Back Plate Screws.
4. Ratchet Wrench.
5. Ratchet Wrench Plate Screws.
6. Ratchet Wrench Pawl.
7. Ratchet Wrench Plate.
8. Ratchet Wrench Bushing.
9. Ratchet Wrench Gear.
10. Lock Nuts.
11. Jaw Screw Plate.
12. Jaw Screw Plate Screws
13. Pipe Rest Y.
14. Pipe Rest Base.
15. Jack Screw.
16. Upper Jaw.
17. Lower Jaw.
18. Pinion.
19. Gear Stop.
20. Front Bearing.
21. Back Bearing.
22. Front Bearing Screws.
23. Power Pinion.
24. Jaw Steels.
25. Lead Block Knobs.
26. Lead Blocks.
27. Cut-off Worm.
28. Cut-off Star Wheel.
29. Lead Block Screw.
30. Lead Block Bushing Screw.
31. Cut-off Worm Strap.
32. Cut-off Worm Gear Shaft.
33. Cut-off Worm Wheel.
34. Stop Slide.
35. Face Plate Knobs
36. Cut-off Block Screw.
37. Face Plate Washers.
38. Cut-off Block Screw.
39. Cut-off Block.
40. Thumb Nuts.
41. Cut-off Block Screw.
42. Die Stop.
43. Shell.
44. Gear Studs.
45. Gear.
46. Face Plate.
47. Dies.
48. Shell Adjusting Screw.
49. Cut-off Stop.
A 50. Cut-off Tool.
A 51. Lead Block Bushing.
A 52. Lead Block Small Screw.

N. B.—When ordering parts, always give the shop number of the machine for which the parts are intended, as stamped on the front rim of the shell. If it is impossible to get this number, then give us the date of the purchase of the machine and from whom, or send us the old part to be duplicated.

NAMES OF PARTS OF THE FORBES PATENT DIE STOCKS.

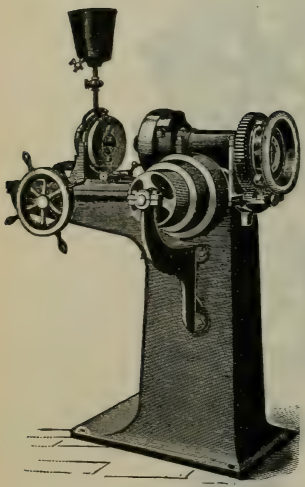


50. Pipe Rest Y.
51. Pipe Rest Base.
52. Feed Lever.
53. } Pressure Bars.
54. }
55. Crank.
56. Crank Socket.
57. Crank Socket Thumb Screw.
58. Feed Lever Screw.
59. Hand Wheel.
60. Lock Nut.
61. Jack Screw Plate.
62. Jack Screw.
63. Pinion for Power Machine.
64. Front Pinion Bearing.
65. Back Pinion Bearing.
66. Front Pinion Bearing Screw.
67. Top Jaw.
68. Bottom Jaw.
69. Pinion for Hand Machine.
70. Back Plate.
71. Shell.
72. Back Plate Screw.
73. Gear.
74. Face Plate.
75. Face Plate Knob.
76. Gear Stud Washer.
77. Die Stop.
78. Gear Stud Thumb Nut.
79. Gear Stud.
80. Die Stop Screw.
81. Stop Slide.
82. Lower Jaw Steel.
83. Upper Jaw Steel.
84. Dies.

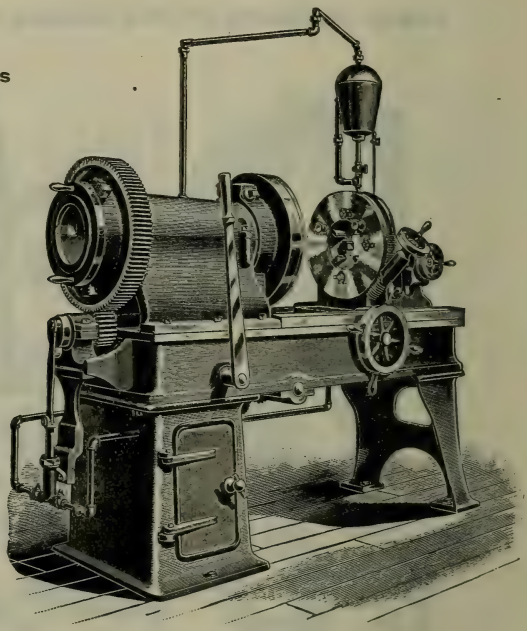
N. B.—When ordering parts, always give the shop number of the machine for which the parts are intended, as stamped on the front rim of the shell. If it is impossible to get this number, then give us the date of the purchase of the machine and from whom, or send us the old part to be duplicated.

JARECKI PIPE CUTTING AND THREADING MACHINES.

BOLT THREADING ATTACHMENTS CAN BE FURNISHED.



L-595. BACK VIEW, NO. 7.



L-597. FRONT VIEW, NOS. 9 AND 11.

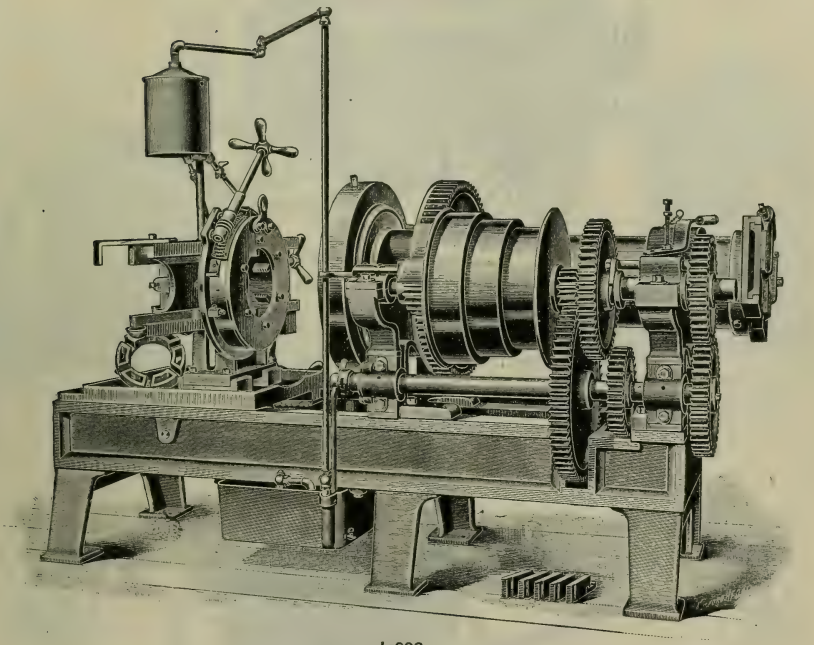
NUMBER OF MACHINE	6	7	7B	9	10	11	12
WITH ADJUSTABLE RIGHT HAND DIES	¼ to 2	¼ to 2	¼ to 3	1 to 4	1 to 4	1½ to 6	1½ to 6
HAND POWER MACHINE	90.00	----	----	----	----	----	----
BELT POWER MACHINE, WITH COUNTERSHAFT	----	105.00	325.00	425.00	----	550.00	----
ENGINE POWER MACHINE	----	----	----	----	475.00	----	600.00
OIL PUMP, EXTRA	15.00	15.00	----	----	----	----	----
CUTTING-OFF KNIVES EACH	.50	.50	.50	.70	.70	.90	.90
APPROXIMATE WEIGHT POUNDS	650	875	1325	2500	2500	2650	2800

Prices on application for Machines cutting 6 to 16 inches.

EXTRA DIES.

ONE SET CUTS THESE TWO SIZES	¼ to ⅜	½ to ¾	1 to 1¼	1½ to 2	2½ to 3	3½ to 4	4½ to 5	6
FOR NUMBER 6 OR 7 MACHINE PER SINGLE SET	2.50	2.50	2.50	2.50	----	----	----	----
FOR NUMBER 7B MACHINE PER SINGLE SET	3.50	3.50	3.50	3.50	3.50	----	----	----
FOR NUMBER 9 OR 10 MACHINE PER SINGLE SET	----	----	4.00	4.00	4.00	4.00	----	----
FOR NUMBER 11 OR 12 MACHINE PER SINGLE SET	----	----	----	4.50	4.50	4.50	4.50	4.50

PIPE THREADING MACHINERY.

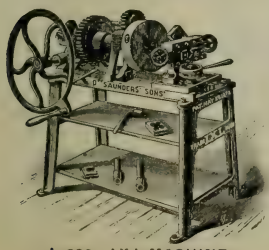


L-603.

SAUNDERS' STANDARD PIPE CUTTING AND THREADING MACHINES.

WITH ADJUSTABLE EXPANDING DIE-HEAD WITH INTERCHANGEABLE CHASERS, AUTOMATIC OIL PUMP AND COUNTERSHAFT, COMPLETE.

NUMBER	2	3	4	5	5A	6	7	8	9
CUTS AND THREADS PIPE . . INCHES	⅛ to 2	⅛ to 3	1 to 4	1½ to 6	2½ to 6	2½ to 8	2½ to 10	4 to 12	8 to 18
PRICE	350.00	500.00	575.00	975.00	925.00	1075.00	1700.00	2000.00	2400.00



L-609. I X L MACHINE.

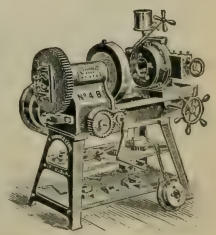
I X L MACHINES. (SOLID DIES.)

CUTS AND THREADS PIPE . . . . INCHES	⅛ to 2
HAND MACHINE	90.00
POWER AND HAND MACHINE	110.00

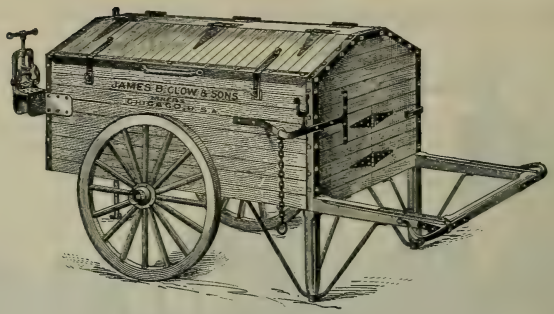
NO. 4B MACHINES.

CUTS AND THREADS PIPE . . . . INCHES	⅛ to 4
HAND MACHINE	320.00
POWER AND HAND MACHINE	405.00

No. 4B has interchangeable dies.



L-612. NO. 4B MACHINE.



L-617.—CLOW TOOL CARTS.

The Clow Tool Cart has been designed to meet actual requirements. It is spacious, accommodating a complete outfit of Tools for Street Work. The Pipe Vise and other attachments facilitate labor. It is strongly built from selected wood and good metal. It travels on its own wheels and may be guided by hand or hauled behind a wagon. It is well balanced and easily drawn. The Chain can be securely locked to wheel, preventing cart from being moved. Covers can also be locked down. It insures safe keeping of Tools and protects from rust. Used by the largest cities in the United States.

SIZE OF BOX, 8 FEET LONG, 4 FEET 8 INCHES HIGH	EACH	100.00



James B. Clow & Sons

Sole Manufacturers

L-621.—TAR MELTING FURNACES.

PRICE, COMPLETE	175.00

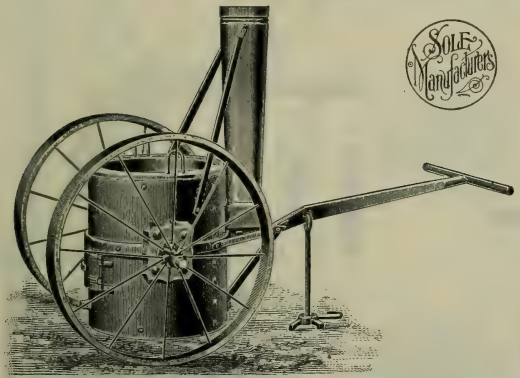
Designed to meet the requirements for a thoroughly reliable Tar Melting Furnace. Like our Lead Melting Furnaces, it is constructed of the best material, and gives excellent satisfaction.

Send for Catalogue of Melting Furnaces.

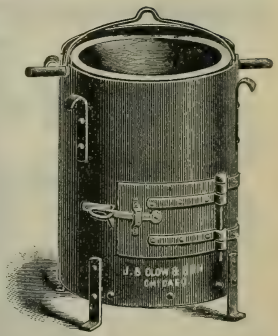
EXTRA PARTS FOR CLOW FURNACES.

NUMBER OF FURNACE		1	2
GRATES FOR FURNACE ON LEGS	EACH	1.50	1.00
POTS FOR FURNACE ON LEGS	EACH	5.50	5.00
GRATES FOR FURNACE ON WHEELS	EACH	1.50	1.00
POTS FOR FURNACE ON WHEELS	EACH	5.50	5.00
WHEELS	PER PAIR	15.00	14.00

WATER WORKS TOOLS.



L-626. CLOW'S IMPROVED MELTING FURNACE ON WHEELS.

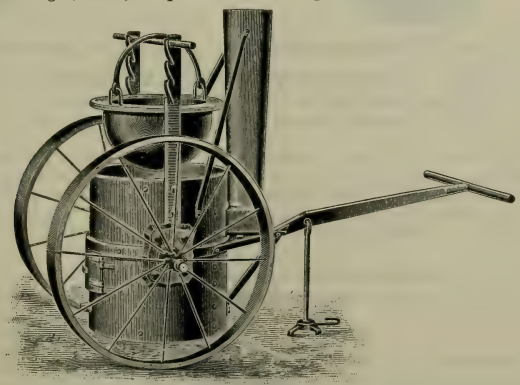


L-629. CLOW'S IMPROVED MELTING FURNACE ON LEGS.

CLOW'S IMPROVED MELTING FURNACES.—L-626 and L-629.

NUMBER	1	2
ON LEGS . . . EACH	49.00	42.00
ON WHEELS . . . EACH	70.00	63.00
ON WHEELS, WITH GASOLINE BURNER AND RESERVOIR ATTACHMENT . . . EACH	105.00	98.00

The No. 1 Furnaces are the standard size, and can be used on the largest work, while the No. 2 are designed for lighter service. Approximate weight, No. 1, 600 pounds; No. 2, 435 pounds.



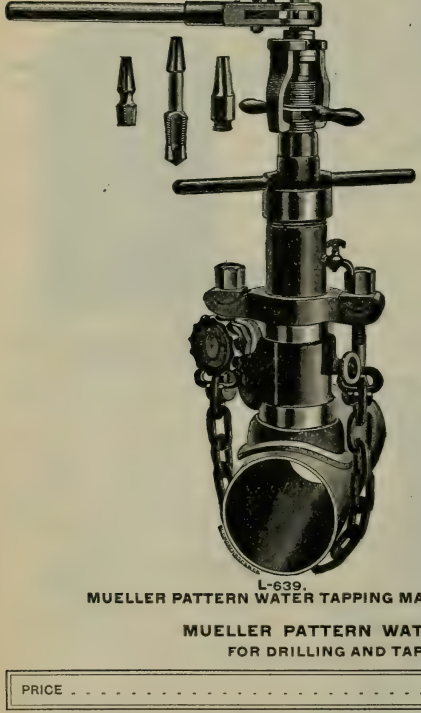
L-633.

WASHINGTON IMPROVED MELTING FURNACES.

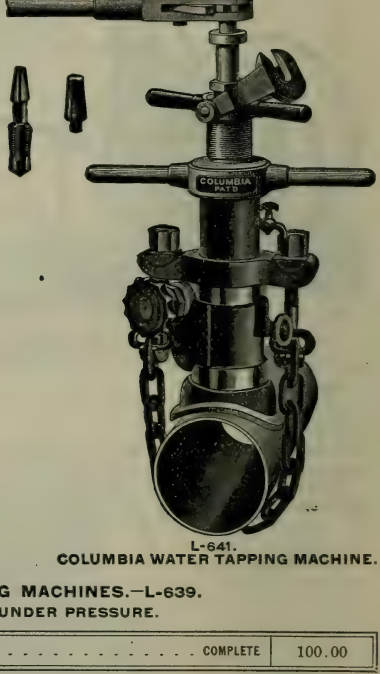
NUMBER 1 . . . EACH	80.00	NUMBER 2 . . . EACH	73.00

Hinged Covers for Pots furnished to order. Add to list No 1, $5.00; No. 2, $3.50.
Descriptive catalogue of Melting Furnaces will be sent upon application.

WATER WORKS TOOLS.



L-639.
MUELLER PATTERN WATER TAPPING MACHINE.



L-641.
COLUMBIA WATER TAPPING MACHINE.

MUELLER PATTERN WATER TAPPING MACHINES.—L-639.

FOR DRILLING AND TAPPING MAINS UNDER PRESSURE.

PRICE	COMPLETE	100.00

Water Tapping Machine complete includes: one each, Combined Drill and Tap—$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1 inch; one each, Screw or Hexagon Plug—$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1 inch; four Malleable Iron Saddles, any size; one Chain for any size Pipe.

In case all the Tools and Saddles are not required, or more Saddles are needed, deduct or add, whichever the case may be, according to price list of extras shown on page 395.

COLUMBIA WATER TAPPING MACHINES.—L-641.

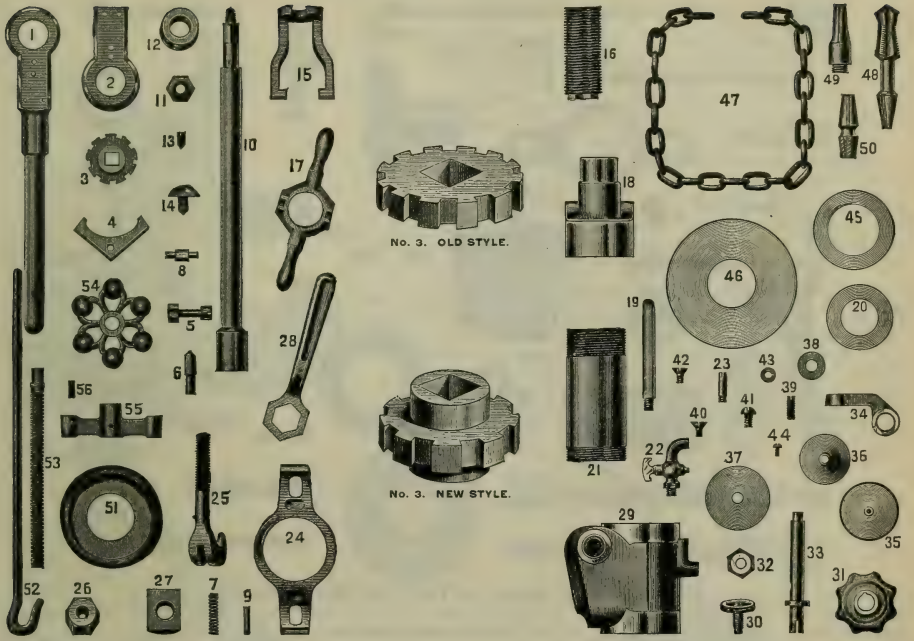
NUMBER		1	2
PRICE	COMPLETE	100.00	150.00

No. 1 Columbia Water Tapping Machine complete includes: one each, Combined Drill and Tap—$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1 inch; one each, Screw or Hexagon Plug—$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1 inch; four Malleable Iron Saddles, any size; one Chain for any size Pipe.

If all the Tools and Saddles are not required, or more Tools and Saddles are needed, deduct or add, whichever the case may be, according to price list of extras.

No. 2 Columbia Machine includes the following: one each, Combined Drill and Tap—1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inch; one each, Screw or Hexagon Plug—1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inch; four Malleable Iron Saddles, any size; one Chain for any size Pipe.

The No. 2 Machine will tap all the small sizes, by getting the Combined Drills and Taps and Plugs.



PARTS OF MUELLER WATER TAPPING MACHINE.

EXTRA PARTS OF RATCHET HANDLE.

No.		
1.	Handle	$ 3.50
2.	Handle Plate	.85
3.	Ratchet Wheel	1.75
4.	Ratchet Dog	1.50
5.	Bolt and Nut	.40
6.	Spring Pin	.40
7.	Spring	.25
8.	Stud	.35
9.	Dowel Pins (2)	.25
	Ratchet Handle complete	$ 9.25

EXTRA PARTS OF BORING BAR.

10.	Boring Bar	$13.50
11.	Case-hardened Hexagon Nut	.25
12.	Collars (2)	1.50
13.	Set Screws for Collars (4)	.40
14.	Thumb Screw	.35
	Steel Boring Bar complete	$16.00
15.	Feed Yoke	1.25
16.	Brass Stuffing Nut	3.50
17	Feed Nut	1.75

EXTRA PARTS OF BRASS CAPS.

18.	Brass Cap	$10.25
19.	Steel Handles (2)	1.75
20.	Washer	.25
	Brass Cap complete	$12.25

EXTRA PARTS OF IRON CYLINDER.

No.		
21.	Cylinder	$ 2.50
22.	Relief Valve	.60
23.	Dowel Pins (2)	.20
	Iron Cylinder complete	$ 3.30
24.	Chain Yoke	2.00

EXTRA PARTS OF CHAIN HOOKS.

25.	Hooks (2)	$ 1.50
26.	Nuts (2)	.75
27.	Washers (2)	.25
	Chain Hooks complete	$ 2.50
28.	Wrench	.60

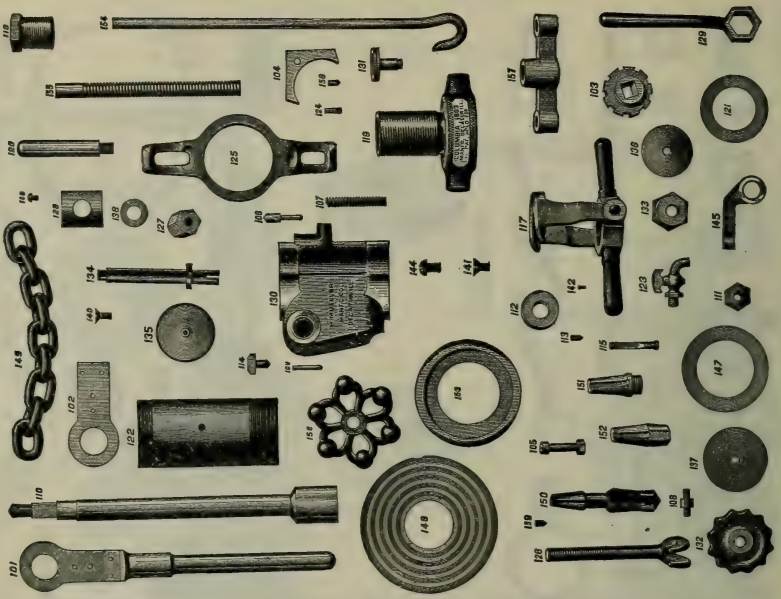
EXTRA PARTS OF BRASS VALVES.

29.	Valve Body	$18.75
30.	Balance Valve	1.25
31.	Stem Hand Wheel	.35
32.	Stem Packing Nut	1.00
33.	Stem	1.75
34.	Gate Arm	1.75
35.	Gate	1.75
36.	Brass Gate Washer	.25
37.	Rubber Gate Washer	.40
38.	Packing Washer for Stem	.20
39.	Screw Pin for Hand Wheel	.10
40.	Screw Holding Arm to Stem	.10
41.	Screw Holding Gate to Arm	.10
42.	Screw Holding Washer to Gate	.10
43.	Washer under Screw No. 41	$0.05
44.	Screw for Balance Valve	.10
	Brass Valve complete	$28.00
45.	4½-inch Rubber Gasket	.25
46.	7½-inch Rubber Gasket	1.25
47	Chain for pipe { 2 to 12 in. incl.	2.25
	{ 2 to 16 in. incl.	2.75
	{ 2 to 36 in. incl.	3.25
48.	Combined Drills and Taps:	
	⅜	3.75
	½	4.00
	¾	4.50
	⅝	5.50
	1	6.50
49.	Screw Plugs: ⅜, ½, ¾, and 1 inch, each	.60
50.	Hexagonal Plugs: ⅜, ½, ¾, ⅝, and 1 inch, each	.60
51.	Malleable Iron Saddles 2, 3, 4, 6, 8, 10, 12, 14, 15, 16, 18, 20, 24, 30, and 36 inch, each	1.00

EXTRA PARTS OF POWER CLEVIS.

52.	Hooks (2)	$ 1.00
53.	Feed Screw	1.75
54.	Hand Wheel	.60
55.	Yoke	1.50
56.	Screw Pin for Hand Wheel	.15
	Power Clevis complete	$ 5.00

In order to avoid mistake or delay when ordering *Ratchet Wheels*, state *Old* or *New* Style.



PARTS OF COLUMBIA WATER TAPPING MACHINE.

EXTRA PARTS, RATCHET HANDLE.

No.		
101.	Handle	$ 4.00
102.	Handle Plate	1.00
103.	Ratchet Wheel	2.00
104.	Ratchet Dog	1.70
105.	Bolt and Nut	.45
106.	Spring Pin	.45
107.	Spring	.30
108.	Stud	.40
109.	Dowel Pins (2)	.30
	Ratchet Handle complete	$10.60

EXTRA PARTS OF BORING BAR.

110.	Boring Bar	$13.50
111.	Hexagon Nut	.30
112.	Collar	.75
113.	Set Screws for Collar (2)	.20
114.	Thumb Screw	.40
115.	Drift	.60
	Boring Bar complete	$15.75
117.	Feed Nut and Yoke	3.00

EXTRA PARTS OF BRASS CAP.

118.	Stuffing Nut	$ 1.75
119.	Brass Cap	10.25
120.	Handles (2)	1.75
121.	Washer	.30
	Brass Cap complete	$14.05

EXTRA PARTS IRON CYLINDER.

122.	Cylinder	$ 2.50
123.	Relief Valve	.70
124	Dowel Pins (2)	.25
	Cylinder complete	$ 3.45
125.	Chain Yoke	2.30

EXTRA PARTS CHAIN HOOKS.

No.		
126.	Chain Hooks (2)	$ 1.50
127.	Nuts (2)	.75
128.	Washers (2)	.25
	Chain Hooks complete	$ 2.50
129.	Wrench	.60

EXTRA PARTS BRASS VALVE.

130.	Valve Body	$21.65
131.	Balance Valve	1.45
132.	Stem Hand Wheel	.40
133.	Stuffing Nut for Stem	1.15
134.	Stem	2.00
135.	Gate	2.00
136.	Brass Gate Washer	.30
137.	Rubber Gate Washer	.50
138.	Packing Washer for Stem	.20
139.	Screw Pin for Hand Wheel	.10
140.	Screw Holding Washer to Gate	.10
141.	Screw Holding Arm to Stem	.10
142.	Screw for Balance Valve	.10
143.	By Pass Screws (2)	.20
144.	Screw Holding Gate to Arm	.10
145.	Gate Arm	2.00
	Brass Valve complete	$32.35
147.	Small Rubber Gasket for Saddles	.30
148.	Large Rubber Gasket for Saddles	1.35
149.	Ext. strong chain for pipe — 2 to 12 in. incl.	2.25
	2 to 16 in. incl.	2.75
	2 to 36 in. incl.	3.25

COMB. DRILLS AND TAPS WITH MUELLER THREAD.

150.	⅝-inch	$3.75

No.		
150-A.	¼-inch	$4.00
150-B.	⅜-inch	4.50
150-C.	½-inch	5.50
150-D.	1-inch	6.50

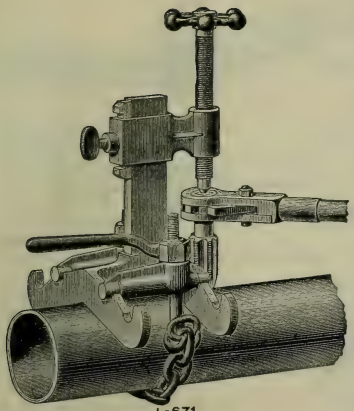
COMB. DRILLS AND TAPS WITH IRON PIPE THREAD.

150-E.	⅜-inch	$3.75
150-F.	¼-inch	4.00
150-G.	½-inch	5.50
150-H.	1-inch	6.50
150-I.	1¼-inch	7.00
150-J.	1½-inch	7.50
150-K.	2-inch	9.50
151.	Screw Plugs: ⅛, ¼, ⅜, ½ and 1-inch, each	.60
152.	Hexagon Plugs: ⅛, ¼, ⅜, ½ and 1-inch, each	.60
153.	Malleable Iron Saddles: 2, 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 24, 30, 36, each	1.15

EXTRA PARTS OF POWER CLEVIS.

154.	Hooks (2)	$1.00
155.	Feed Screw	1.75
156.	Hand Wheel	.70
157.	Yoke	1.75
158.	Screw Pin for Hand Wheel	.15
	Power Clevis complete	$5.35

Drills and Taps with Iron Pipe Thread up to 2 inches, as above listed, can be used in making gas pipe taps, but corporation cocks up to 1 inch only can be used in this machine.



L-671.

OUR SPECIAL DRY PIPE AND GAS MAIN TAPPING MACHINE

L-671. COMPLETE, LESS RATCHET, DRILLS, AND TAPS	9.00
RATCHET HANDLE COMPLETE	8.25

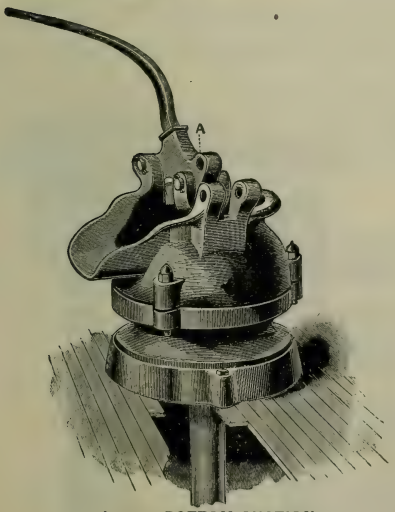
COMBINED TAP AND DRILLS FOR DRY MACHINE.

SIZE — INCHES	⅜	½	⅝	¾	1	1¼	1½	2	2½
IRON PIPE THREAD — EACH	3.00	4.00	----	4.50	5.00	6.25	7.50	9.50	12.00
CORP. COCK THREAD, EACH	----	4.00	4.25	4.50	5.00	----	----	----	-----

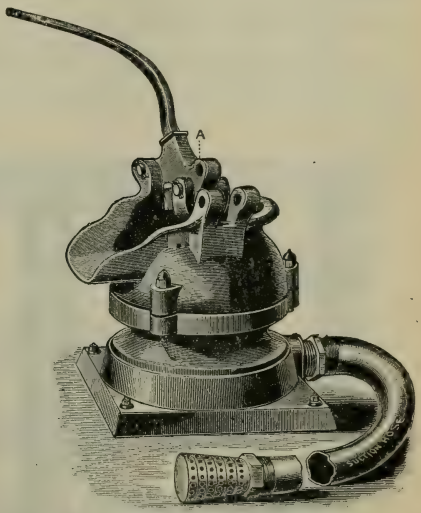
"Our Special" Dry Pipe and Gas Main Tapping Machine is a substitute for the Old Style Crow Hook for drilling and tapping of any kind. It is much superior to the Crow, and cheaper, as it performs the same work that would require three or more wrought-iron Crow Hooks. With this machine any size pipe can be tapped, depending on the length of chain.

Machine and Ratchet, boxed, without Drills and Taps, weighs 54 pounds.

In ordering a Machine, state sizes of Tools desired and size of the largest main to be tapped. If not specified, chain for a 12-inch pipe will be sent. Tools with Standard iron pipe thread will be sent unless otherwise ordered.



L-675. BOTTOM SUCTION.



L-679. SIDE SUCTION.

DIAPHRAGM TRENCH PUMPS.—L-675 and L-679.

NUMBER	1	2
SIZE OF SUCTION — INCHES	2½	3
CAPACITY — GALLONS PER HOUR	1500	3500
L-675. PUMP ONLY — EACH	18.00	24.00
L-679. PUMP ONLY — EACH	20.00	26.00

Price, 12 feet of 3-inch Spiral Flat-wired Suction Hose (specially made for this purpose), fitted with Hose, Nipple, Couplings, Brass Strainer, complete, $35.00; if with Iron Strainer, $32.00; extra Diaphragms, net, $3.00.



L-689. POURING POT.





L-697. STEEL GANG LADLES.



L-693. STEEL LADLE.

POURING POTS.—L-689.

EACH	3.50

HANDLES FOR POURING POTS.

EACH	45

STEEL LADLES.—L-693.

SIZE — INCHES	8	10	12
EACH	5.50	7.25	8.50

STEEL GANG LADLES.—L-697.

DIAMETER — INCHES	10	11	12	13	15	17
DEPTH — INCHES	9½	10½	11½	12½	15	18
LEAD CAPACITY — POUNDS	200	300	400	500	650	800
PRICE — EACH	12.00	13.25	15.00	17.00	20.00	25.00



L-699. STEEL TAMPER FOR TAMPING UNDER PIPE.
Each . . 5.00



L-701. ROUND TAMPER, IRON HANDLE.
Each . . 3.50



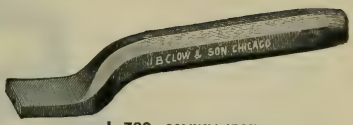
L-703. SQUARE TAMPER, IRON HANDLE.
Each . . 3.50



L-706. ROUND-HEAD CROWBAR.
Each . . 5.50



L-716. YARNING IRON.



L-720. CALKING IRON.

YARNING IRONS.—L-716.

NUMBER 1. ⅛-INCH THICK AT POINT . . . . . EACH	.85
NUMBER 2. $\frac{1}{16}$-INCH THICK AT POINT . . . . . EACH	.90

*CALKING IRONS.—L-720.

NUMBER	1	2	3	4	5	6	7	8
SIZE INCHES	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
EACH	.70	.70	.70	.75	.75	.80	.80	.85



L-723. COLD CHISEL.

COLD CHISELS.—L-723.

NUMBER	1	2	3	4	5	6
SIZE INCHES	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
EACH	.60	.60	.65	.70	.70	.80



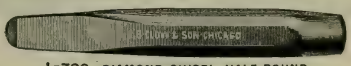
L-727. PIPE-CUTTING CHISEL.



L-732. DIAMOND CHISEL, TRIANGULAR POINT.



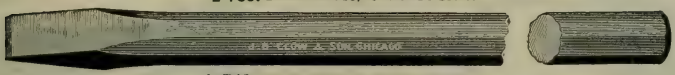
L-734. DIAMOND CHISEL.



L-736. DIAMOND CHISEL, HALF-ROUND.



L-739. BRICK CHISEL, 18 INCHES LONG.



L-742. WALL CHISEL, 30 INCHES LONG.

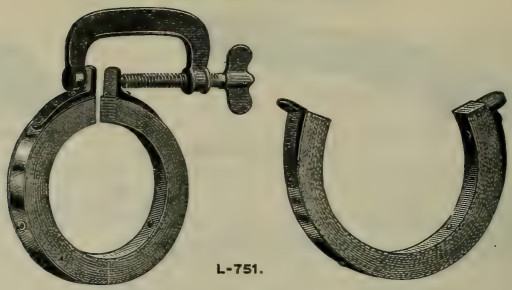


L-744. WALL CHISEL, 30 INCHES LONG, DIAMOND POINT.

CHISELS.

FIGURE	L-727	L-732	L-734	L-736	L-739	L-742	L-744
EACH	1.40	.85	.85	.70	2.00	3.40	3.40

Our Water Works Tools are hand-made, from the highest grade steel. Each tool is stamped with our name, and warranted.
*Right or Left Hand Calking Irons for close work made to order.

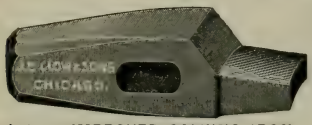


L-751.

PATENT PIPE JOINTERS.—L-751.

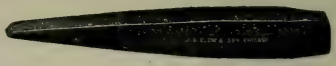
SIZE . . . . INCHES	2	3	4	6	8	10	12	16	20	24	30	36	42	48
EACH	2.25	3.25	3.75	5.25	6.50	7.00	8.00	10.00	11.50	12.50	13.00	14.00	16.50	18.00

This Pipe Jointer is the invention of a practical pipe layer, and is designed to take the place of Clay Rolls, Clayed Rope and other devices, for retaining melted lead in Pipe Joints until it hardens.



L-754. IMPROVED CALKING IRON.

Made in five sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ and $\frac{7}{8}$-inch . . . each, 1.65



L-756. STEEL WEDGES.

No. 1, $1\frac{1}{2}$ inches square . . . . . each, 2.25
No. 2, 2 inches square . . . . . each, 4.50



L-760. EXTENSION WRENCH FOR SCREWING TAPS IN PIPE.
Each 13.00



L-763. IRON SPIRIT LEVEL.
Each 5.50



L-767. GAS MAIN BAG.



L-771. STEEL BRANDING STAMP.

GAS MAIN BAGS.—L-767.

DIAMETER . . . . . INCHES	2	3	4	6	8	10	12	14	16	18	20	24	30	32	36
PRICE . . . . . EACH	.80	.90	1.00	1.40	1.90	4.20	5.40	8.30	11.25	14.50	18.00	25.00	39.00	44.00	53.00

L-771, Steel Branding Stamps. Price according to number of letters, from 4.25 to 5.50 each.

DIFFERENTIAL BLOCKS.—L-777.



L-777.
DIFFERENTIAL
BLOCK.

CAPACITY . . . . . TONS	¼	½	1	1½	2	3
HOIST . . . . . FEET	6	7	8	8½	9	9½
WEIGHT . . . . . POUNDS	22	30	51	81	122	180
COMPLETE . . . . . EACH	18.00	21.00	28.00	36.00	45.00	60.00
EXTRA HOIST . . . . . PER FOOT	2.80	2.80	3.00	3.20	3.40	4.00

DUPLEX DIFFERENTIAL BLOCKS.—L-779.

CAPACITY . . . . . TONS	½	1	1½	2	3	4
HOIST . . . . . FEET	8	8	8	9	10	10
WEIGHT . . . . . POUNDS	43	57	76	104	200	225
COMPLETE . . . . . EACH	25.00	30.00	40.00	50.00	70.00	95.00
EXTRA HOIST . . . . . PER FOOT	1.25	1.30	1.35	1.40	1.50	1.95
CAPACITY . . . . . TONS	5	6	7	8	10	--
HOIST . . . . . FEET	12	12	12	12	12	----
WEIGHT . . . . . POUNDS	340	360	370	390	570	----
COMPLETE . . . . . EACH	125.00	150.00	175.00	200.00	250.00	----
EXTRA HOIST . . . . . PER FOOT	2.00	2.80	3.00	3.10	3.20	----



L-779.
DUPLEX BLOCK.

BELL BOTTOM JACK SCREWS.—L-782.



L-782.
JACK SCREW.

LENGTH OF BASE . . INCHES	5	6	8	10	12	14	16	18	20	24
DIAMETER SCREW . 1¼ INCHES	3.50	3.75	4.25	4.75	5.25	6.00	6.75	-----	-----	-----
DIAMETER SCREW 1¾ INCHES	----	4.50	5.00	5.75	6.25	6.75	7.50	8.50	-----	-----
DIAMETER SCREW 2 INCHES	----	5.25	6.00	6.75	7.50	8.25	9.25	10.25	11.50	13.50
DIAMETER SCREW . 2¼ INCHES	----	----	7.50	8.25	9.00	10.00	11.00	12.00	13.25	15.75
DIAMETER SCREW . 2½ INCHES	----	----	8.75	9.75	10.75	12.00	13.25	14.50	15.75	18.25

CLOW SAND DRIERS.—L-785.



L-785. SAND DRIER.

NUMBER	1	2
CAPACITY PER DAY . . . . . TONS	5	10
PRICE . . . . . EACH	45.00	75.00

SALAMANDERS.—L-787.

GAUGE OF STEEL NUMBER	16	18	20	21
EACH	6.00	5.50	5.00	4.50

Extra Grates, each, $1 00.



L-787. SALAMANDER.



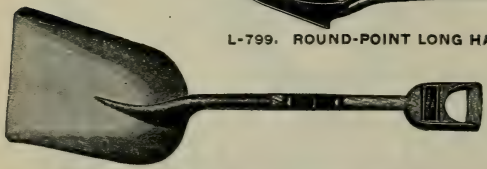
L-795. SQUARE-POINT RAILROAD SHOVEL.



L-797. ROUND-POINT DITCH SHOVEL.



L-799. ROUND-POINT LONG HANDLE DITCH SHOVEL.



L-801. COAL SCOOP—SIZE, 14¼×17¾ INCHES.



L-803. D-HANDLE SPADE.

SHOVELS.

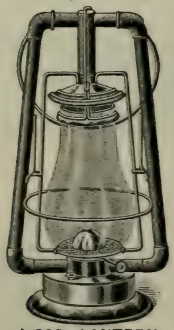
FIGURE	L-795	L-797	L-799	L-801	L-803
BLACK PER DOZEN	14.25	14.50	14.25	24.00	-----
POLISHED PER DOZEN	15.25	15.50	15.25	-----	17.00



L-806. PICK.

WEIGHT POUNDS	4	5	6	7	8	9
L-806. PER DOZEN	11.00	12.00	13.00	14.00	16.00	18.00

Extra Quality Turned Hickory Handles, 36 inches long. Per dozen, 4.50.



L-809. LANTERN.



L-811. COKE FORK.

TUBULAR DITCH LANTERNS.—L-809.

WITH PLAIN GLASS GLOBES PER DOZEN	9.00
WITH RUBY RED GLASS GLOBES PER DOZEN	12.00

COKE FORKS.—L-811.

NUMBER	1	2	3	4
WIDTH INCHES	14½	18	18	18
EACH	2.00	2.35	2.75	3.50

DUNN EXTENSIBLE TRENCH BRACES.



L-820. ALL IRON BRACE.



L-822. COMBINED SCREW AND TIMBER BRACE.

ALL IRON BRACES.—L-820.

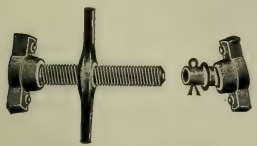
LENGTH, WHEN CLOSED . . . . . INCHES	16	18	21	24	27	30	36	42	48	54	60
WITH 1¼-IN. SCREW AND 1¼-IN. PIPE. PER DOZ.	27.75	27.75	28.75	28.75	31.25	31.25	32.50	33.75	34.75	------	------
WITH 2-IN. SCREW AND 2-IN. PIPE . PER DOZ.	------	------	------	------	------	------	------	62.50	64.50	64.75	66.00

Safety limit of extension 16 inches to 10 inches, according to length of brace.

COMBINED SCREW AND TIMBER BRACES.—L-822.

SIZE OF SCREW . . . . . INCHES	1¼x14	1½x14	1½x18	2x18	2x18	2x18
SIZE OF CAP . . . . . INCHES	4x4	6x6	6x6	6x6	8x8	9x12
PRICE . . . . . PER DOZEN SETS	21.75	24.00	26.50	45.75	48.00	52.75

This style of brace can be used in any width of trench from 2 to 30 feet. It will be found especially valuable in wide and deep trench and foundation work. We do not furnish timbers.



L-825. BRACE FITTING.

SIZE OF SCREW . . INCHES	1¼x12	1¼x14	1½x16	1½x18	2x18
PRICE . . . . . PER DOZEN	24.00	25.25	26.50	27.50	54.00

We furnish our Braces in this form to parties who wish to put on pipe to suit themselves. Simply the plain pipe is required for the barrel, no machine work being required other than to drill the small hole in one end to permit of the insertion of cotter pin which holds the brace together. This cotter pin may be removed at any time and longer or shorter pipe substituted.

Use 1¼-inch pipe for the 1¼-inch screws, and 2-inch for the 2-inch screws. Cut pipe 7 inches shorter than length of complete brace wanted when closed.



L-827. DRIVING CAP.

FOR SHEATHING OR SHOEING IN EXCAVATIONS.

SIZE	6 INCH INSIDE OF HEAD. 8 INCH ACROSS BASE OF LUGS.
PRICE . . . . . EACH	3.50

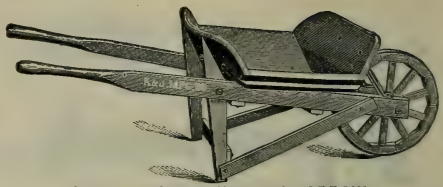
Made of Malleable Iron.

The Lugs overcome the tendency of the Cap to rebound off the plank and also assist in holding the Cap firmly while being driven.



L-840. STEEL TRAY DIRT BARROW.

Each 6.25



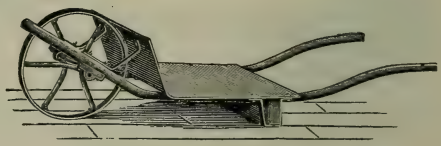
L-842. JACOBS' WOODEN BARROW.

Each 2.75



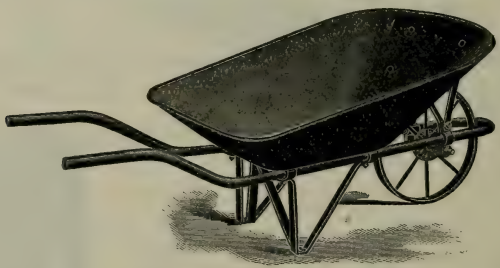
L-844. STEEL PIG IRON BARROW

Size, 20x23 . . each, 8.00



L-846. STEEL STONE BARROW.

Size, 21x24 . . each, 6.00



L-848. TUBULAR STEEL BARROW.

Coal Barrow, Capacity 250 Pounds Coal . . . . . each, 20.00
Coal Barrow, Capacity 425 Pounds Coal . . . . . each, 28.00
Coke Barrow, Capacity 5 Bushels . . . . . each, 26.00



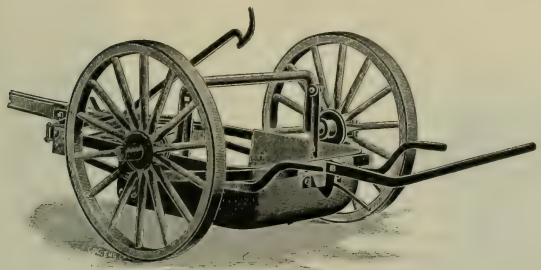
L-850. TWO-WHEEL STEEL COAL BARROW.

Capacity, 500 Pounds . . . . . each, 18.00



L-852. STEEL FOUNDRY BARROW.

No. 1. Capacity, 3 Cubic Feet . each, 8.00
No. 2. Capacity, 5 Cubic Feet . each, 10.00

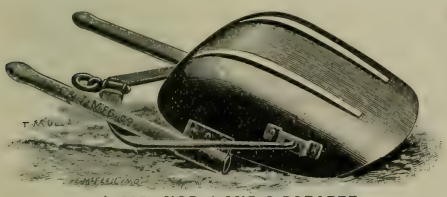


L-865. WHEEL SCRAPER.

IMPROVED STEEL BOWL WHEEL SCRAPERS.

NUMBER	2	3
CAPACITY . . . CUBIC FEET	13	17
PRICE . . . EACH	50.00	55.00

The best, strongest and easiest working Wheel Scraper ever put on the market. The bowl is stamped from one solid plate of wrought steel, $\frac{3}{16}$ of an inch thick, without joint, seam or rivet.



L-868. NOS. 1 AND 2 SCRAPER.



L-870. NO. 3 DITCHING SCRAPER.

COLUMBUS SOLID STEEL SCRAPERS.

NUMBER	1	2	3
CAPACITY . . . CUBIC FEET	7	5	3
PRICE . . . EACH	8.00	7 75	7.50

No. 1.—Used for long haul or down grade. No. 2.—For all ordinary grading, road or township work.

No. 3.—This Improved Ditching Scraper is made with extra long nose, and the cutting edge is well sharpened, so that it enters the ground as readily as a plow, and it will work well in any kind of soil, whether plowed or not. It is a great favorite with highway commissioners and township trustees, as it is easy on horses, and can be used for general light road work, as well as for ditching purposes, and has greater capacity than any other one-horse Scraper in the market.

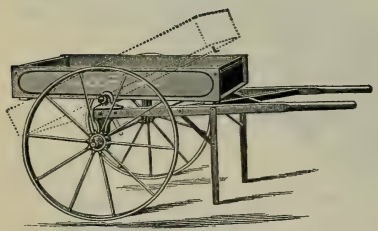


L-873. STEEL BOX.

STEEL TOTE BOX.

Suitable for handling bolts, tools, nails, nuts, washers, small castings, ore, quartz, and other rough or heavy substances. Size, 16¼ inches long, 9¼ inches wide, 4½ inches deep; No. 16-gauge steel. The upper edges of the sides are lapped ½-inch, stiffening and strengthening the box and giving it a smooth finish. Handle riveted on each end, of same gauge steel as box. Weight of box, complete, only 8 pounds.

PRICE . . . EACH	1 25



L-885. RED CROSS CART.



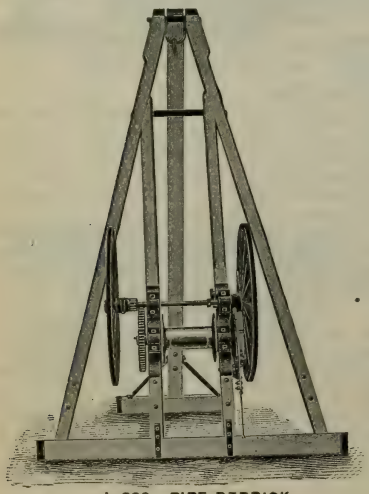
L-887. SHOWING BARREL IRONS.

RED CROSS CARTS.—L-885.

The Box and Barrel are interchangeable in a moment's time. Pivot Box can be removed or replaced without changing a bolt. Pivoted Barrel allows it to swing or to be picked up, moved, dumped or dropped. The construction of the frame makes it rigid, while the arrangement of pivot irons, both of barrel and box, brings the strain of the load on the axle and pivot irons, and the strain is sustained by the barrel and box respectively. Several barrels can be used by having extra barrel irons. Wheels are of wood with iron hubs, or can be supplied all steel, if desired.

CART, WITH BOX AND ONE SET OF BARREL IRONS	EACH	7.00
CART, WITHOUT BOX, BUT WITH ONE SET OF BARREL IRONS	EACH	5.50
EXTRA SETS OF BARREL IRONS	PER SET	1.00

Barrels not included in the above. The regular kerosene oil barrels are suitable for use with the cart. In ordering, specify Red Cross.



L-890. PIPE DERRICK.

DERRICKS.—L-890.

This illustration shows Derrick adopted by the Water Departments of Chicago and Milwaukee. It is also used by many other cities and by gas companies for laying large mains. The bearings and gear are so nicely adjusted that a forty-eight-inch pipe or valve can be raised or lowered by a boy. This Derrick can be moved along a ditch or from one street to another with little effort, only requiring to be turned over on to the wheels and rolled like a cart.

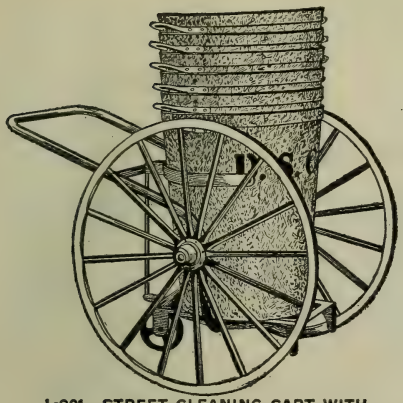
The wheels are of carriage pattern, especially constructed for this purpose. Timbers are of best quality Norway pine, free from all knots, checks, etc., well seasoned and perfectly dry. The pinion and drum shafts are of cold rolled steel, and gearing of cast steel.

NUMBER	1	2	3
FOR LAYING PIPE OR VALVES. INCHES	12 to 30	36	48 to 60
PRICE EACH	150.00	175.00	225.00

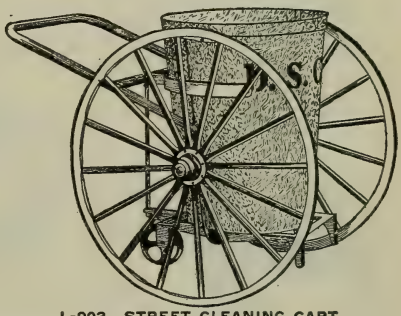
Blocks and rope not included in the above list.

We build these Derricks to order on short notice.

Endless Rope slings for any size pipe made to order from 1, 1½, or 2-inch rope.



L-901. STREET CLEANING CART WITH NEST OF CANS.



L-903. STREET CLEANING CART WITH CAN.

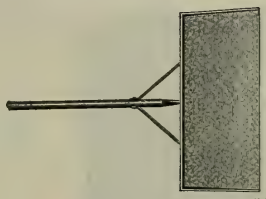
STREET CLEANING CART AND CANS.

CARTS	EACH	22.00
CART WITH ONE CAN	COMPLETE	27.00
CART WITH NEST OF 6 CANS	COMPLETE	50.00
CANS ONLY	EACH	5.00



L-905. STREET BROOM.

16-inch, 5 Rows, Bass, with Scraper - each, 2.50
16-inch, 5 Rows, Bass, without Scraper - each, 2.25



L-907. STEEL SCRAPERS.

Length, 34 inches - - - - - each, 8.00



L-910. ASH CAN.

GALVANIZED ASH CANS.—L-910.

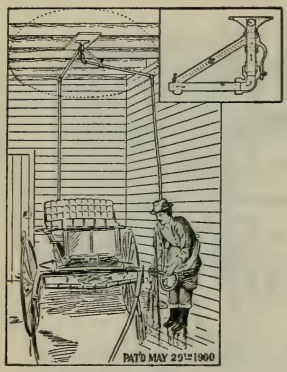
NUMBER	7	8	9	10
SIZE . . . INCHES	15 x 26	17 x 26	18 x 26	20 x 26
EACH	6.50	7.50	8.00	8.50
COVERS - EACH	.85	1.00	1.10	1.20

GALVANIZED MILL PAILS.—L-912.

10-QUART	PER DOZEN	7.50
12-QUART	PER DOZEN	8.50
14-QUART	PER DOZEN	8.75



L-912. HEAVY MILL PAIL.



L-920.
PERFECTION BUGGY WASHER.

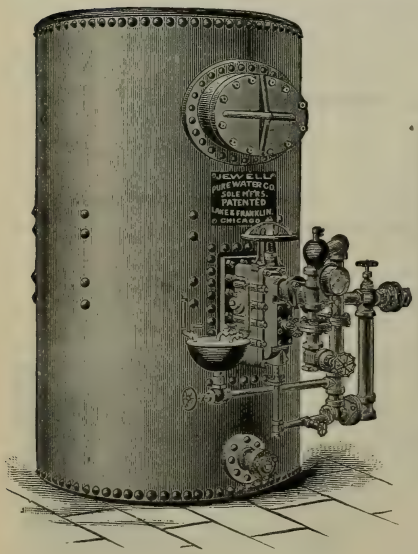
PERFECTION BUGGY WASHER.—L-920.

This apparatus supports the hose in such a way that it can be carried around the vehicle in any direction with a minimum of hose and labor, also a large saving of water and wear of hose.

No. 1	ONE BALL-BEARING JOINT AND ONE ARM . .	EACH	7.50
No. 2	ONE BALL-BEARING JOINT AND TWO ARMS .	EACH	10.00
No. 3	TWO BALL-BEARING JOINTS AND TWO ARMS .	EACH	12.00

JEWELL WATER FILTERS.

FOR CITIES, WATER WORKS, FACTORIES, PUBLIC BUILDINGS, ETC.



L-925.

STANDARD SIZES OF PRESSURE FILTERS.

CAPACITY BASED AT 40 POUNDS PRESSURE IN FILTER.

Diameter. Inches.	Pipe Connections.	Capacity in U. S. Standard Gallons per 24 Hours.	Price, with Chemical Tank, Complete, each.
12	¾	3,000	100.00
16	¾	8,000	225.00
24	1	20,000	425.00
30	1¼	30,000	600.00
36	1½	45,000	725.00
42	2	60,000	840.00
48	2	75,000	1,000.00
54	2½	100,000	1,200.00
60	2½	125,000	1,500.00
72	3	170,000	1,900.00
84	4	235,000	2,350.00
96	4	310,000	2,900.00
120	6	500,000	4,200.00

Special High Pressure Filters for Water Works use, or Gravity Filters constructed to order of any capacity. Prices are free on board cars at Chicago. Special Catalogue of Filters sent on application.

PLUMBERS' AND MISCELLANEOUS TOOLS.



L-935. SHAVE HOOK, WITH ADJUSTABLE BLADE.

Each 70



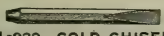
L-936. TRIANGULAR SHAVE HOOK.

Each 30



L-937. OVAL SHAVE HOOK.

Each 30



L-939. COLD CHISEL.

¾-inch . . . . . each .25



L-941. CALKING CHISEL.

Each 40



L-942. RIGHT OR LEFT HAND CALKING CHISEL.

Each 30



L-943. STUB CALKING CHISEL.

Each 50



L-945. TAP BORER

Each 40



L-947. HACK SAW BLADES.

Size . . . . . Inches	8	10	12
Per dozen	.75	.90	1.00



L-949. SPRING YARNING IRON.

Each 50



L-952. BENDING PIN.

Medium	each	.20
Extra Heavy	each	.30



L-954. ROUND IRON.

Number	1	2	3
Each	.60	.75	.90



L-956. COMPASS SAW.

12-inch . . . . . each .40



L-958. IMPROVED HACK SAW.

Size . . . . inches	8	10	12
Each	.85	1.00	1.20



L-960. PLUMBER'S SAW.

Size . . . . . inches	12	14	16
Single Edge . . each	.60	.75	.85
Double Edge . . each	.75	.85	.95



L-962. SCREW-DRIVER.

Size . . inches	6	7	8	10	12
Each	.20	.25	.30	.50	.75



L-965. IMPROVED LEAD PIPE BENDER.

Size . inches	1	1¼	1½	2
Each	.50	.55	.65	.90



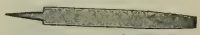
L-967. BOXWOOD RULE.

Two Foot . . . . . each .25



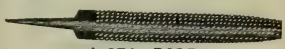
L-969. IRON POCKET SPIRIT LEVEL.

Each 25



L-971. FILE.

Size . . . . . inches	10	12	14
Half-round . . . each	.35	.40	.50
Flat . . . . . each	.25	.35	.45



L-974. RASP.

Size . . . . inches	10	12	14
Each	.35	.45	.65



L-977. NEST OF SAWS.

Complete 1.00



L-978. BASIN WRENCH.

Each 1.75



L-980. GOUGE.

One Inch . . . . . each .45



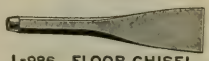
L-982. TINNERS' SNIPS.

Cuts . . Inches	2½	3	3½
Each	1.25	1.40	1.60



L-984. CHISEL.

One Inch . . . . . each .45



L-986. FLOOR CHISEL.

Each 1.00

PLUMBERS' AND MISCELLANEOUS TOOLS.



L-990. CHIPPING KNIFE.

Size . . . . . inches	4½	5
Each	.40	.45



L-992. DUSTER.

Each 50



L-994. BOXWOOD DRESSER.

Each 75



L-997. SIDE EDGE.

Each 60



L-998. TURN PIN.

Number	1	2	3
Each	.25	.25	.25



L-1000. TWO FOOT IRON SQUARE.

Each 1.25



L-1002. CALIPERS.

Size, inches	2½	3	4	5	6
Each . . .	.25	.25	.30	.35	.40



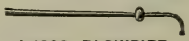
L-1004. DRIFT PLUG.

1, 1¼, 1½ or 2 inch . . . . . each .15



L-1006. BOSSING STICK.

Each 75



L-1008. BLOWPIPE.

Each 30



L-1010. GREASE BOX.

Each 1.25



L-1012. SOIL CUP.

Each 35



L-1014. COMPASS.

Each 45



L-1016. TOOL BAG.

Plain	each 3.50
Leather Bottom	each 4.25
Leather Bottom and Sides	each 5 00



L-1018. FLAT SOIL BRUSH.

Each 12



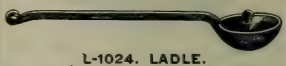
L-1020. HATCHET COPPER BOLT.

Weight, lbs. . .	2	2½	3	4
Per pound				.30



L-1022. POINTED COPPER BOLT.

Weight, lbs.	½	¾	1	1½	2	2½	3
Per pound							.50



L-1024. LADLE.

Size . .	2½	3	3½	4	5	6
Each . .	.25	.30	.40	.45	.55	.75



L-1026. WIPING CLOTH.

Moleskin	each .20
Ticking	each .15



L-1028. CANDLESTICK.

Each 25



L-1030. TORCH.

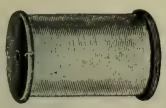
Tin	each 1.00
Brass	each 1.25

PLUMBERS' AND MISCELLANEOUS TOOLS.



L-1035. TAPE MEASURE.

50-foot Cotton Tape, Ass Skin Case . . . . . each .50
50-foot Linen Line, Chesterman Leather Case . . . . . each 3.00
50-foot Steel Line, Chesterman Leather Case . . . . . each 8.50



L-1038. COPPER WIRE.

Gauge No. 12, 14 and 16. Per pound 50



L-1040. PLUMB BOB.

Small size . . . . . each .35
Large size . . . . . each .50



L-1042. PLUMBER'S FRIEND FORCE CUP.

Each 1.75



L-1045. TACK MOULD, PLAIN PATTERN.

Single . . . . . each 2.50
Double . . . . . each 3.25



L-1047. SOLDER POT.

Size . inches	5	6	6½	8
Each . . .	.35	.50	.65	.80
Size . inches		9	10½	13½
Each . . .		1.00	1.50	2.25



L-1049. LOOKING-GLASS.

Each 35



L-1051. RUBBER FORCE CUP.

Number	1	2	3
Each	.30	.40	.55



L-1054. WASHER CUTTER.

Each 1.25



L-1058. TACK MOULD, STAR PATTERN.

Single . . . . . each 2.50
Double . . . . . each 3.50



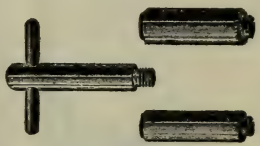
L-1061. PATENT RATCHET BRACE.

10-inch Sweep . . . . . each 2.25



L-1063. BREAST DRILL.

Each 3.50



L-1065. DETACHABLE BIBB REAMER.

For ½ and ⅝ Bibbs, Basin and Bath Cocks . . . . . per set 2.50



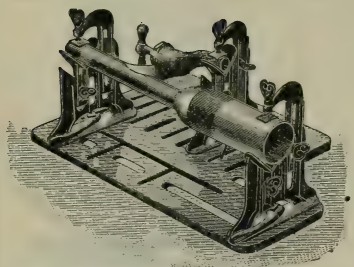
L-1068. PLUMBER'S LAMP.

Each 35



L-1071. STRAP SOLDER MOULD, HALF-ROUND BAR.

Each 1.50

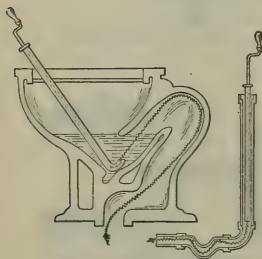


L-1085. ADJUSTABLE WIPING BRACKETS.

HALL'S PATENT
UNIVERSAL ADJUSTABLE WIPING BRACKETS.

For Plumbers' use, to hold pipes, etc., in position while wiping joints on the same. It is simple, easily and quickly adjusted, and light, yet strong.

Price - - - - - - each, $4.00

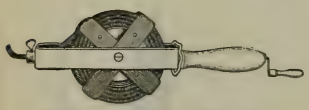


L-1088. CLOSET AUGERS.

WRIGLEY FLEXIBLE AUGERS.—L-1088.

COMPLETE	EACH	5.00
EXTRA AUGER WIRE	PER FOOT	.25
EXTRA CORKSCREWS	EACH	.25
EXTRA STEEL CONES	EACH	.10
EXTRA BRASS COLLARS	EACH	.10

The cut illustrates the Closet Auger and the method of operating it through passages until the obstruction is reached. Then, by turning the handle, it is caught and brought out to the operator. The Auger will go completely through any pattern of Closet.



L-1090. FLEXIBLE AUGERS.

FLEXIBLE AUGERS.—L-1090.

SIZE NO. 1 COMPLETE	EACH	5.00
EXTRA AUGER WIRE	PER FOOT	.20
EXTRA THUMB-SCREW AND COLLAR	EACH	.25

This machine carries nine feet of Auger Wire and is made especially for use in Drain Pipes leading from Lavatories, Bath Tubs and Urinals.



L-1095.
LITTLE GIANT PUMP.
FOR SINKS AND
LARGE OPENINGS.

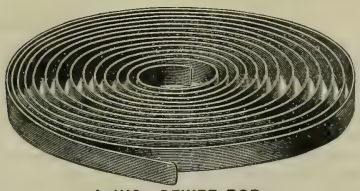
LITTLE GIANT HOUSEHOLD PUMPS.

For cleaning pipes the Little Giant Pump is indispensable. It clears pipes quickly and thoroughly and will fit almost any Bowl or Fixture. Its operation is similar to that of a bicycle pump, very simple and easy. There are two attachments for each Pump, an Adjustable Washer to fit any pipe from ¾ to 2-inch, and a Patent Lift and Force Cup which will cover a 4-inch opening. The latter is to be used where openings are covered by screens or strainers. When using Pump, close the Overflow.

Each - - - - - - - - - - - - - - $3.00



L-1097.
LITTLE GIANT PUMP.
FOR LAVATORIES
AND SMALL PIPES.



L-1110. SEWER ROD.

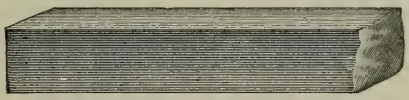
SEWER RODS.—L-1110.

60 TO 75 FEET	EACH	5.50



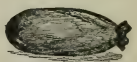
L-1115. PLUMBERS' PREPARED SOIL.

Pint Cans . . each, .25
Quart Cans . each, .65



L-1118. GAS FITTERS' CEMENT.

Per Pound 12



L-1120. PUTTY.

In 10 to 20-pound Bladders.
Per Pound . . .06



L-1123. LEAD PIPE EXPANDING PLIERS.

PATENTED.

The only tool that will turn out a collar on lead traps and pipes. In expanding the ends of lead pipe with these Pliers there is no danger of stocking or bending the pipe.

Each 1.25



L-1125. CATCH BASIN DIPPER.

Each 2.00



L-1130. NAME PLATE.



L-1132. ROUND NAME PLATE.

NAME PLATES.

L-1130. GERMAN SILVER	PER DOZEN	5.25
L-1130. CAST BRASS	PER DOZEN	Special
L-1132. GERMAN SILVER, DIAMETER 1¼ INCHES	PER DOZEN	4.25

We make a large variety of Name Plates, both in Brass and German Silver. Special designs made to order.



L-1142.
ALUMINUM CEMENT.

ALUMINUM CEMENT FOR PLUMBERS' USE.—L-1142.

This is a careful combination of metals known to resist all forms of corrosion, and which will admit of expansion or contraction without the least injury to the thoroughly water and heat-proof joint produced by it, and which can be broken after years of wear without the slightest damage to pipe or coupling. It comes in an exceedingly fine powdered form, and when mixed with pure boiled linseed oil produces a homogeneous combination of great elasticity and durability.

SIZE OF PACKAGE . . . . . POUNDS	1	5	10	20	100
PRICE . . . . . PER CAN	.25	1.25	2.50	5.00	----
PRICE . . . . . PER KEG	------	------	------	------	20.00

WISCONSIN GRAPHITE PIPE JOINT PASTE.

FOR STEAM FITTING, GAS AND WATER PIPE CONNECTIONS, BOILER RIVETS, LOCOMOTIVE STAY BOLTS, ETC.

Wisconsin Graphite is better and cheaper than red or white leads—and much more effective—making an air-tight joint that will resist heat, cold, acids or alkalies. It gives at once a joint that will last for all time, and yet in case of necessity can be disconnected without injury to the thread. It makes a doubly secure joint and prevents corrosion. The self-sealing can is always tight, preventing waste.

SIZE OF CAN . . . . . POUNDS	------	¼	½	1	5
PRICE . . . . . PER CAN	------	.10	.15	.25	1.00
5-GALLON KITS . . . . . PER POUND	.15	------	------	----	------
BARRELS . . . . . PER POUND	.14	------	------	------	------



L-1148.
PORCELA.

PORCELA.—L-1148.

FOR CLEANING ENAMELED BATH TUBS, ALL ENAMELED WARE AND PORCELAIN.

There has been a vigorous demand for a preparation that will clean Bath Tubs and other enameled goods without injuring the enamel. This is met in Porcela. It will remove grease and dirt quickly and easily, and is guaranteed not to injure the enameled surfaces. It is equally good for Porcelain Fixtures. Will not injure the hands.

In half-pound packages . . . . . Per Package, .25



L-1151.
SOLARINE.

SOLARINE, FOR CLEANING BRASS, NICKEL, ETC.—L-1151.

SIZE OF PACKAGE	1/16 Pint	⅛ Pint	1 Pint	1 Quart	½ Gallon	1 Gallon	3-Ounce Box	8-Ounce Box	1-Pound Box	5-Pound Pail	10-Pound Pail
LIQUID . . . . . PER CAN	.15	.25	.40	.65	.75	1.25	----	----	----	----	----
PASTE . . . . . EACH	----	----	----	----	----	----	.10	.25	.45	1.35	2.70

SCHNEIDER'S SOLDERING FLUID.

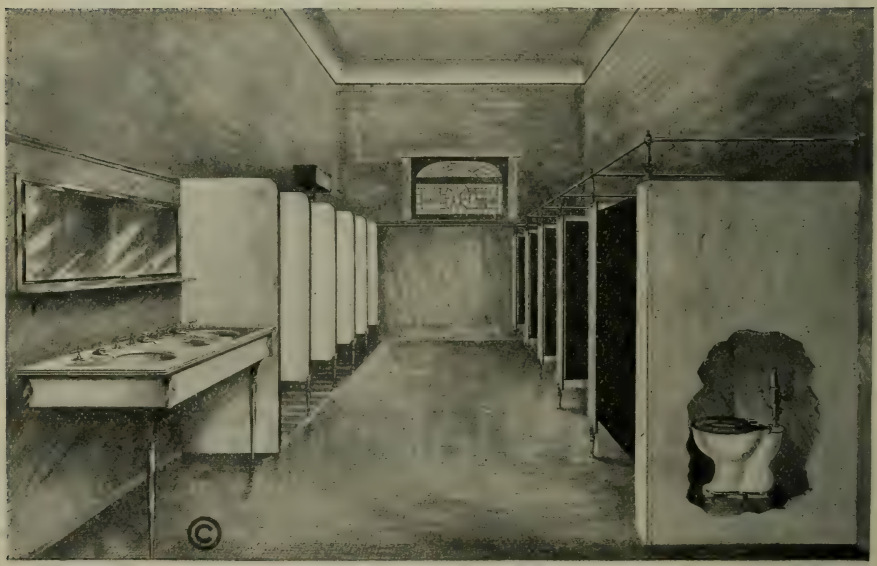
FOR SOLDERING TIN, COPPER, BRASS, ETC.

CAPACITY OF CANS	1 Pound	2 Pounds	4 Pounds	1 Gallon	10 Gallons
SOFT SOLDERING FLUID . . . . . PER CAN	.50	.90	1.60	2.80	22.50
HARD SOLDERING FLUID . . . . . PER CAN	1.00	2.00	3.50	5.00	45.00

It is positively non-poisonous to touch or handle, and free from acid. A one-pound package of our fluid added to seven pounds or parts of water makes one gallon of soldering fluid, which is stronger and better than any so-called fluids on the market.

PLUMBING

CLOW PUBLIC LAVATORY.



CLOSET STALLS—Italian Marble Partitions, Backs and Pilasters, N. P. Standards, Railings, Flanges, Angles, Stirrups, Single Action Hinges, Indicator Bolts, Door Strikes and Mahogany Doors.

DIMENSIONS—Height of Backs and End Partitons, 6 feet; Center Partitions, 5 feet; depth, 5 feet; height of Pilasters, 5 feet; width of Stalls, 3 feet center to center; thickness of Ends, Partitions and Backs, ¾ inch; Pilasters, 1¼ inches; height of Door, 4 feet 6 inches; width, 2 feet 4 inches; thickness, 1¼ inches.

Price, two Stalls complete as described,	$298.00
For each additional Stall,	115.00
If with Oak Doors, deduct, per Stall,	3.50

CLOSETS—For Closets, see M-725, page 469.

URINALS—For Urinals, see N-1, page 509.

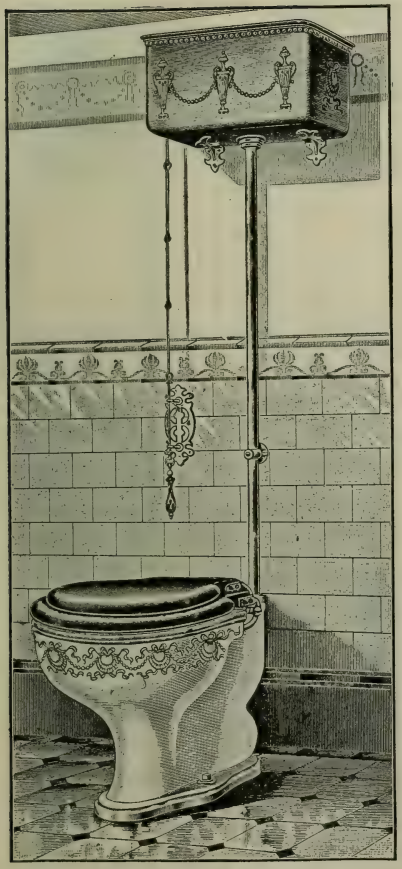
LAVATORY—Italian Marble Slab, 24x72 inches, 1½ inches thick, 5-inch Aprons, 15x19-inch Oval Basins, N. P. Corinthian Combination Supply and Waste with China Handles, Supply Pipes with Air Chambers, Traps, Recessed Legs and Apron Supports, Basin Clamps, complete, $137.00

LAVATORY TRIMMINGS—Beveled Plate Glass Mirror with Nickel Plated Brass Frame, 30x72 inches, 70.00
Plate Glass Shelf, 5x72 inches, ½ inch thick, and three N. P. Brackets, 20.00

Our Sanitary Manufacturing Department is splendidly equipped for the execution of special designs for Toilet Room Interiors. We devote particular and careful attention to this department and guarantee the finest materials and workmanship in Brass and Marble work of the most elegant character. Special designs furnished upon application.

CLOW SIPHON JET CLOSETS.

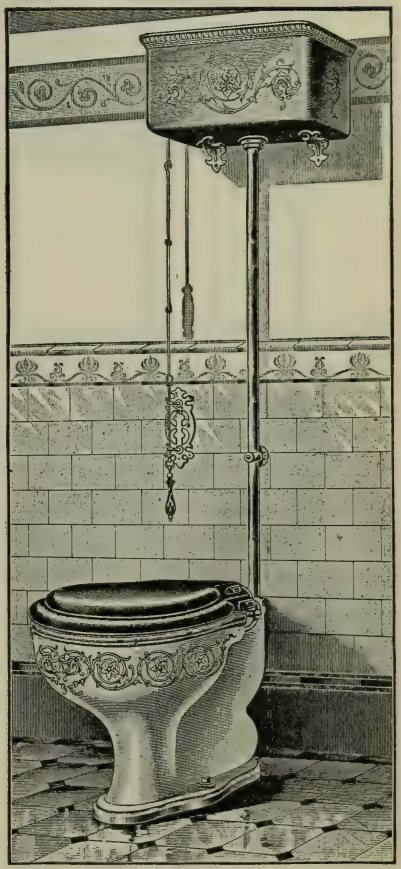
MADDEN'S PATENT.



M-1.

COLONIAL.—Siphon Jet with concealed Jet Arm, embossed, with Gold Tracing or tinted Pale Green or Shell Pink, San Domingo Mahogany Seat and Cover, Embossed Tank, White Enameled or Mahogany, 21 x 10 x 12 inches inside, 1⅛-inch Nickel Silver Flush Pipe, Nickel Silver Trimmings, China Pull and Brass Floor Flange - - - - - - - - $90.00





M-2.

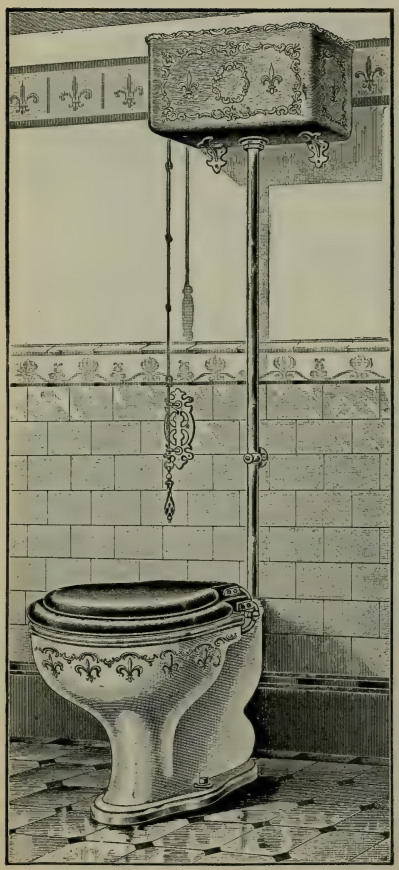
RENAISSANCE.—Siphon Jet with concealed Jet Arm, embossed, tinted Pink with Gold Tracing, San Domingo Mahogany Seat and Cover, Embossed Tank, White Enameled or Mahogany, 21x10x12 inches inside, 1⅛-inch Nickel Silver Flush Pipe, Nickel Silver Trimmings, China Pull and Brass Floor Flange . $90.00

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

Mahogany Seats and White Enameled Tanks afford a pleasing contrast and make an artistic combination. We do not recommend White Enamel for Seats, as it is not at all serviceable.

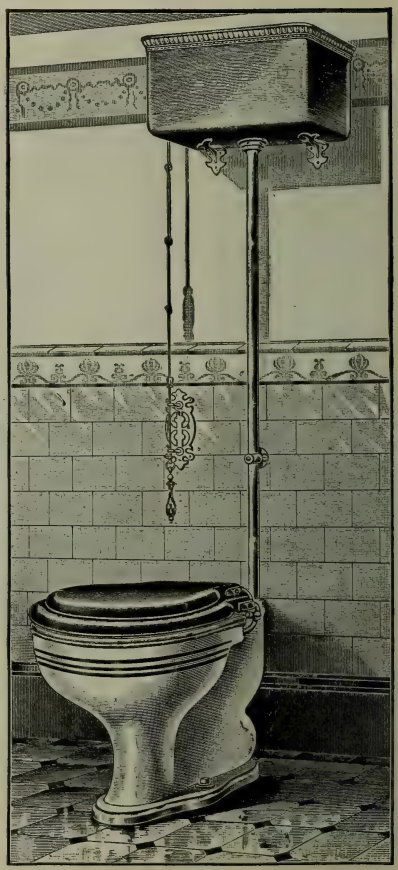
CLOW SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-3.

Rococo.—Siphon Jet with concealed Jet Arm, embossed, with Gold Tracing or tinted Shell Pink or Pale Blue, San Domingo Mahogany Seat and Cover, Embossed Tank, White Enameled or Mahogany, 21x10x12 inches inside, 1⅜-inch Nickel Silver Flush Pipe, Nickel Silver Trimmings, China Pull and Brass Floor Flange, $85.00



M-4.

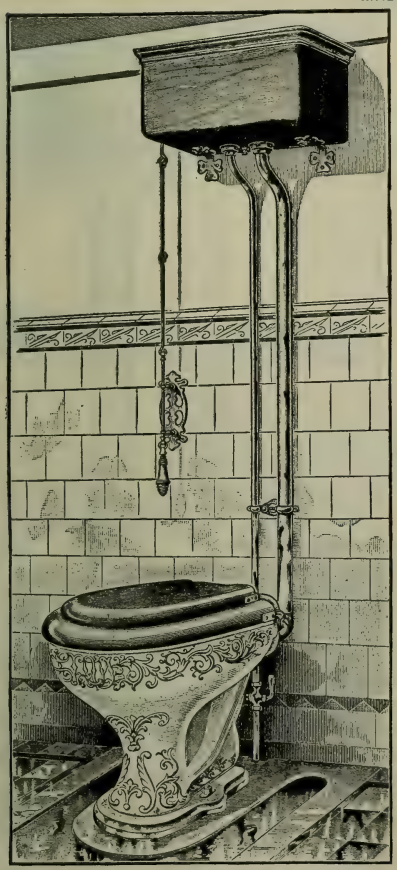
Ornamental.—Siphon Jet with concealed Jet Arm, Gold Lines, San Domingo Mahogany Seat and Cover, Tank, White Enameled or Mahogany, 21 x 10 x 12 inches inside, 1⅜-inch Nickel Silver Flush Pipe, Nickel Silver Trimmings, Pull and Brass Floor Flange, $75.00

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

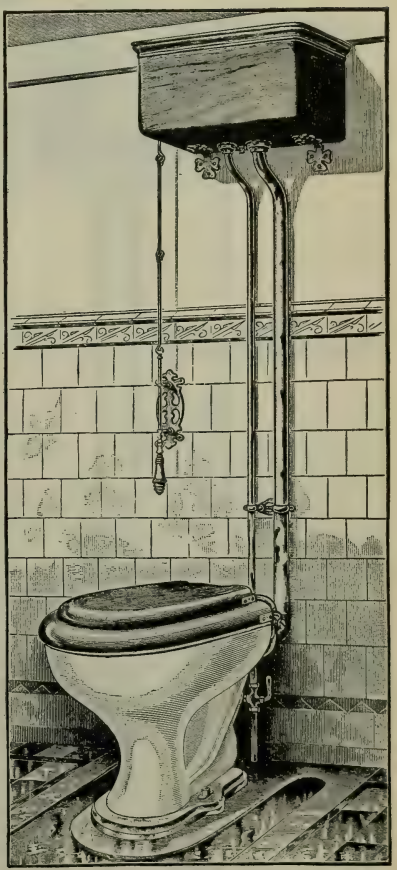
Mahogany Seats and White Enameled Tanks afford a pleasing contrast and make an artistic combination. We do not recommend White Enamel for Seats, as it is not at all serviceable.

CLOW SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-18.



M-19.

Adamantose, Square-back Siphon Jet Closet with Seat and Lid hinged to Bowl, Round Cornered Bent Wood Tank, 21 x 10 x 14 inches inside, N. P. Tank Supports, 1¾-inch Flush Pipe and Slip Joint, ¾-inch Supply Pipe, Protector, Guide, Link Rod and China Pull, Brass Floor Flange, Bolts and Rubber Gasket.

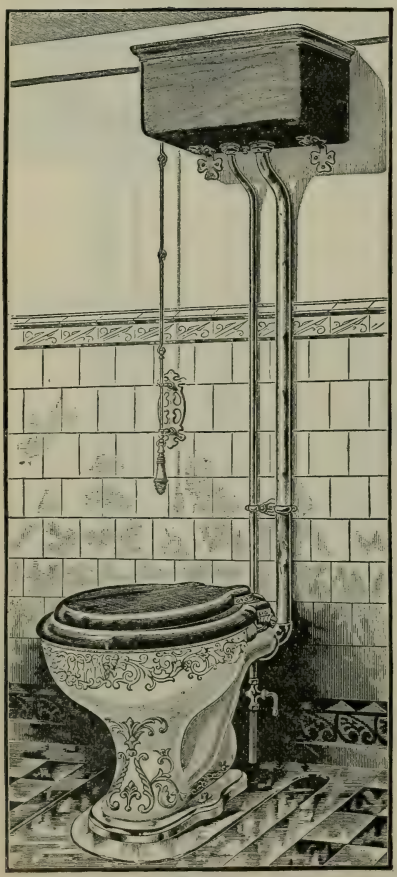
M-18. Embossed Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry,	$60.00
M-19. Plain Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry,	59.00
If with Sycamore, White or Bird's Eye Maple, Red or White Mahogany woodwork, add	5.00
If with Marble Floor Slab, 26 x 26 inches, 1¼ inches thick, as shown, add	8.00
If with Plain Hardwood Tank for installation behind wall, deduct	2.00

Tanks for operating the above Jet Closets contain sufficient water for two successive flushes.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

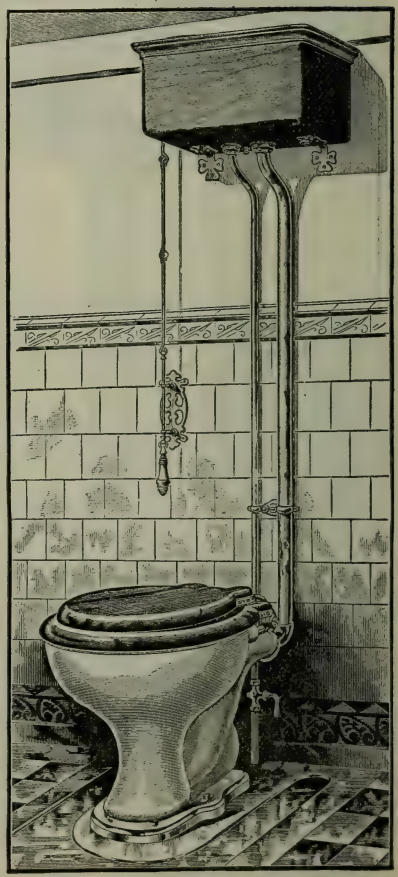
CLOW SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-42.





M-43.

Adamantose Oval Siphon Jet Closet with Seat Hinged to Bowl, No. 1 Round Cornered Bent Wood Tank, 21x10x14 inches inside, N. P. Tank Supports, 1¼-inch Flush Pipe and Slip Joint, ¾-inch Supply Pipe, I. P. Size, Protector, Guide, Link Rod and China Pull, Brass Floor Flange, Bolts and Rubber Gasket.

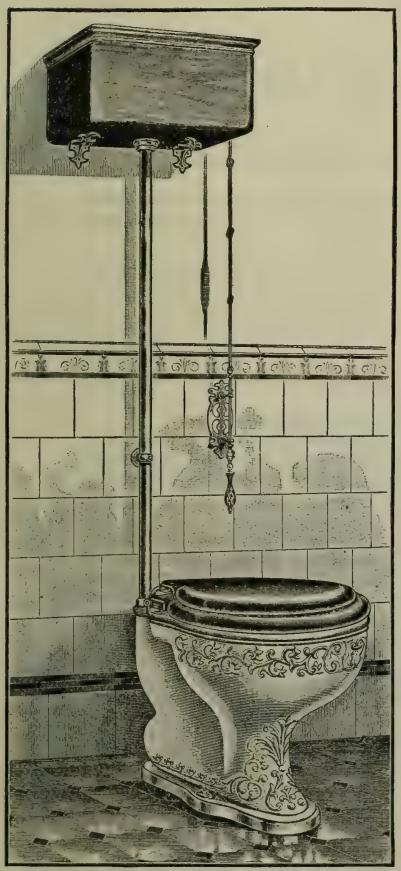
M-42. Embossed Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry, ... $57.00
M-43. Plain Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry, ... 56.00
If with Sycamore, White or Bird's Eye Maple, Red or White Mahogany woodwork, add 5 00
If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, as shown, add 8 00
If with plain hardwood Tank for installation behind wall, deduct 2 00

Tanks for operating the above Jet Closets contain sufficient water for two successive flushes.

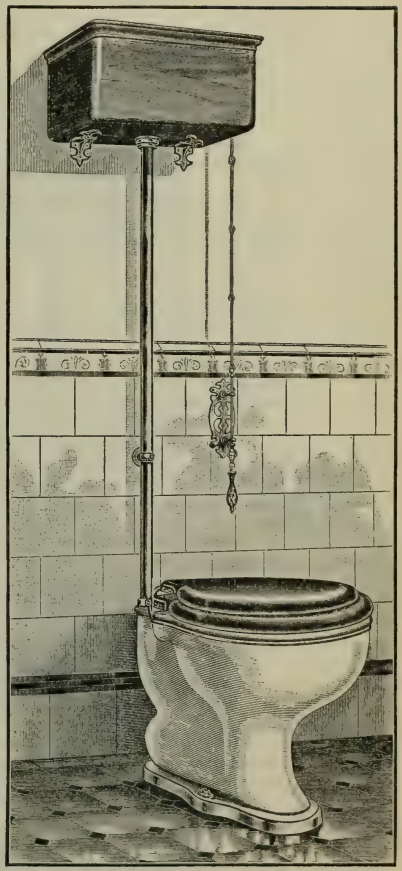
Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

CLOW SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-58.



M-59.

Adamantose Oval Siphon Jet Closet with concealed Jet Arm, Seat hinged to Bowl, No 2 Round Cornered Bent Wood Tank, 21x10x14 inches, Nickel Plated Brass Tank Supports, 1¼-inch Flush Pipe with Protector, Wall Guide, Link Rods with China Pull, Brass Floor Flange, Bolts and Rubber Gasket.

M-58. Embossed Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry, ... $52.50
M-59. Plain Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry, ... 51.50
If with Decorated Bowl, add 10.00
If with Sycamore, White or Bird's Eye Maple, Red or White Mahogany woodwork, add 5.00
If with N. P. Supply Pipe and Stop Cock, ⅝-inch I. P. Size, add 4.00
If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, add 8.00

Tanks for operating the above Jet Closets contain sufficient water for two successive flushes.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

CLOW ADAMANTOSE CLOSETS.

At the present writing, the Clow Oceanic Siphon Jet is the only Closet in existence, with unusually large siphon limb and perfect siphonic action, which is operated by a single Jet.

The desirability of this feature cannot be too much emphasized, for it is the one point toward which Closet builders have been striving, namely, to build a *large* Closet, having a very large water way, and which could be *successfully* operated by one Jet.

The objection to two or three Jets is that they multiply opportunities for occlusion. In the single Jet, however, these liabilities are reduced to a minimum, while the concentration of force in the one powerful stream of water adds materially to the efficiency of the fixture.

The Clow Oceanic, therefore, is one more triumph in the science of Closet building, and is one of the most notable additions to our already famous line of Madden patent Closets, which have long stood first on the world's list of fine Closets.

The Oceanic bowl is of unusual size and strength. It is substantial, handsomely proportioned and solid, having an exceptionally thick shell and weighing thirty pounds more than any other Porcelain bowl. It is made of Clow's Adamantose Ware and therein lies the secret of its durability. This Ware is entirely different from ordinary Porcelain.

Look at the hard, compact and vitreous surface of a glazed Porcelain and you know what Adamantose looks like all the way through. But chip a bit of the vitreous coating or glaze off from the Porcelain and the porous, absorbent clay, or "biscuit," is exposed; while, should a bit of the Adamantose be chipped off, its broken edges, close and glassy, would be just as non-absorbent as its outer surface. This may readily be demonstrated by the ink test, the most ragged, broken surfaces of Adamantose being wholly impervious to the fluid.

This uniformly vitreous body is produced by long firing at an extremely high heat, until the entire body of the Porcelain is actually glazed throughout.

As there is no thin, vitreous layer disintegral with the inner body, Adamantose absolutely cannot craze. Close, firm and uniform in substance, it is practically indestructible. The Oceanic, therefore, has the distinct advantage of being *a Porcelain Closet with the strength of Iron.*

The Tank furnished with this Closet is also unusually large and has the special Madden Valve, which is so constructed that its operation can be perfectly adjusted to discharge exactly the amount of water required, two or three complete flushes, as desired, being obtainable from one tank of water. The water is thus economically utilized and not uncontrollably wasted, as is the case when the ordinary siphon valve or single discharge Tank is used.

Our Tanks are of Bent Wood and joined by a patent process, the most approved method of modern Tank construction. We absolutely guarantee them against warping, cracking or splitting.

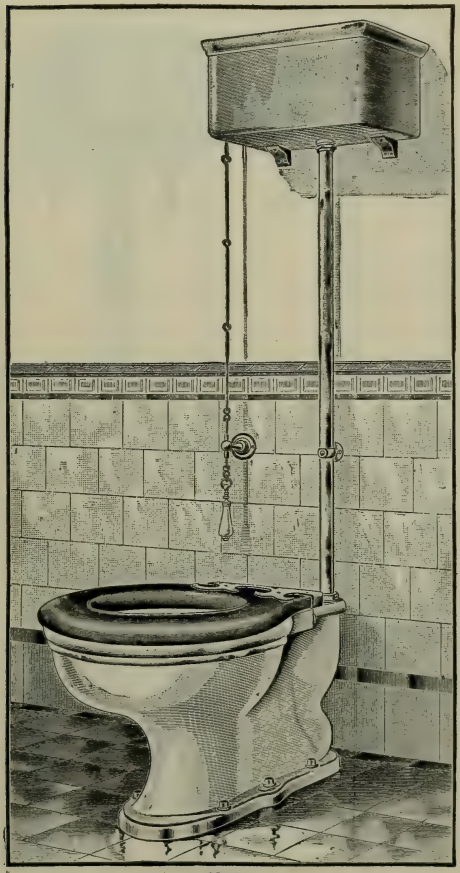


The Seat Attachment on our patent Closets is not only sanitary but of great strength. The rubber cushion inserted in the earthenware bears all strain, absolutely preventing breakage of Bowl.

CLOW OCEANIC SIPHON JET CLOSETS.

MADDEN'S PATENT.

WITH IRON TANK FOR SALT WATER.



M-61.

Adamantose Porcelain Closet with concealed Jet Arm and 3½-inch Siphon Limb, 1¼-inch Reinforced Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 2 Iron Tank enameled inside and outside, 21 x 10 x 14 inches inside, Iron Tank Supports, 1¼-inch N. P. Flush Pipe with Protector, Wall Guide, Link Rods and China Pull, Brass Floor Flange, Bolts and Rubber Gasket.

M-61. Complete as described,	$64.00
If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add	5.00
If with Clow Non-condensing Tank Enamel, add	3.00

We guarantee the Clow Non-condensing Tank Enamel, when applied to Iron Tanks, to prevent atmospheric condensation (commonly called sweating) on outside of Tank.

Our Iron Tanks are specially constructed to allow for the use of salt water. We therefore recommend these fixtures for use near the seacoast. The above combination is extensively used in tropical countries.

CLOW OCEANIC SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-62.

Adamantose Porcelain Closet with concealed Jet Arm and 3½-inch Siphon Limb, 1¼-inch Reinforced Oak Seat hinged to Bowl, N P Ornamental Box Hinge, No. 2 Round Cornered Bent Wood Oak Tank, 21 x 10 x 14 inches inside, extra heavy Tank Brackets, 1¼-inch N. P. Flush Pipe with Protector, Wall Guide, Link Rods and China Pull, Brass Floor Flange, Bolts and Rubber Gasket.

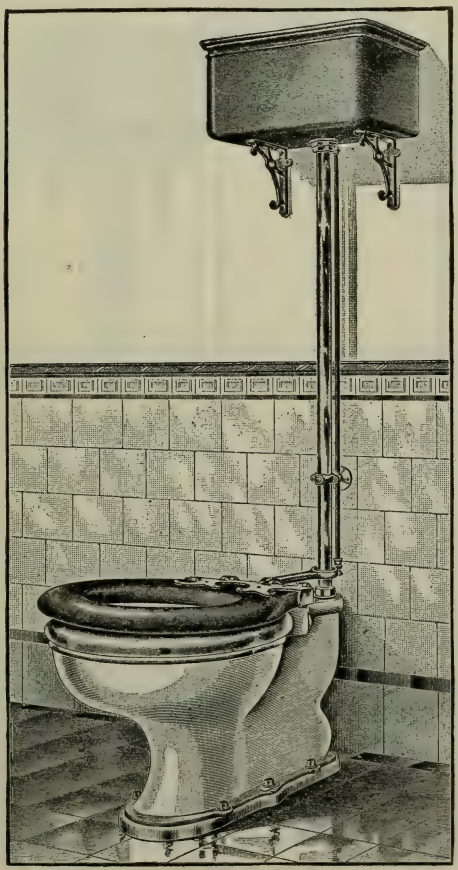
M-62. Complete as described, ... $64.00
If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add 5.00

The Clow Oceanic Siphon Jet Closets are specially designed for use in Public Buildings, Institutions, Barracks, Railway Stations, etc.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

CLOW OCEANIC SIPHON JET CLOSETS.

MADDEN'S PATENT.



James B. Clow & Sons

Sole Manufacturers

M-63.

Adamantose Porcelain Closet with concealed Jet Arm and 3¼-inch Siphon Limb, 1¼-inch Reinforced Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 2 Round Cornered Bent Wood Oak Tank, 21 x 10 x 14 inside, with Automatic Rod Action, extra heavy N. P. Tank Brackets, 1¼-inch N. P. Flush Pipe with Protector, Brass Floor Flange, Bolts and Rubber Gasket.

M-63. Complete as described,	$72.50
If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add	5.00

The Clow Oceanic Siphon Jet Closets are specially designed for use in Public Buildings, Institutions, Barracks, Railway Stations, etc.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

CLOW OCEANIC SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-64.

Adamantose Porcelain Closet with Concealed Jet Arm, 3½-inch Siphon Limb and Wall Outlet, 1½-inch Reinforced Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 2 Round Cornered Bent Wood Oak Tank, 21 x 10 x 14 inches inside, extra heavy Tank Brackets, 1¼-inch N. P. Flush Pipe with Protector, Wall Guide, Link Rods and China Pull, Brass Flange, Bolts and Rubber Gasket.

M-64. Complete as described,	$65.00
If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add	5.00

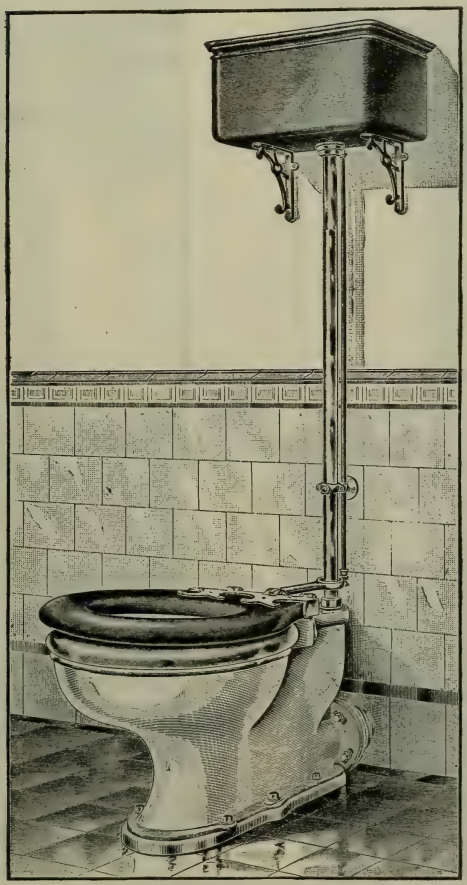
The Clow Oceanic Siphon Jet Closets are specially designed for use in Public Buildings, Institutions, Barracks, Railway Stations, etc.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

CLOW OCEANIC SIPHON JET CLOSETS.

MADDEN'S PATENT.

James B. Clow & Sons



Sole Manufacturers

M-65.

Adamantose Porcelain Closet with Concealed Jet Arm, 3¼-inch Siphon Limb and Wall Outlet, 1¼-inch Reinforced Oak Seat hinged to Bowl, No. 2 Round Cornered Bent Wood Oak Tank, 21 x 10 x 14 inches inside, with Automatic Rod Action, extra heavy N. P. Tank Brackets, 1¼-inch N. P. Flush Pipe with Protector, Brass Flange, Bolts and Rubber Gasket.

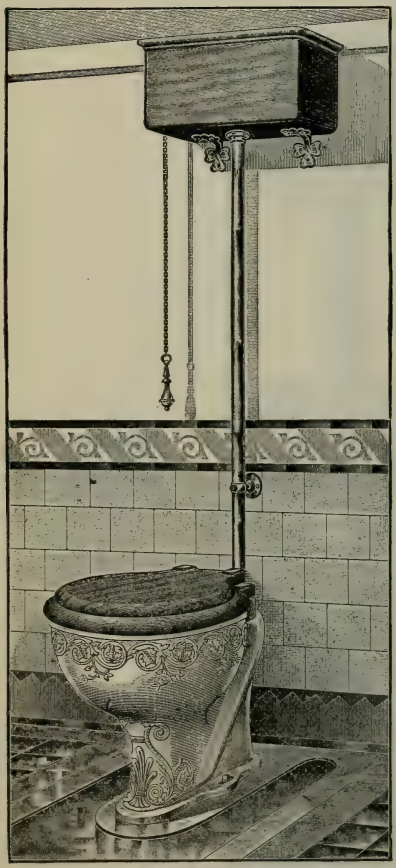
M-65. Complete as described, ... $74.00
If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add 5.00

The Clow Oceanic Siphon Jet Closets are specially designed for use in Public Buildings, Institutions, Barracks, Railway Stations, etc.

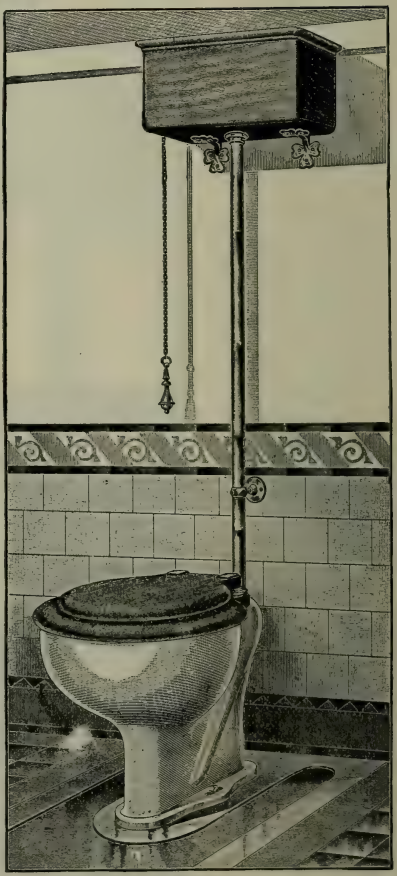
Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

THE BUENA SIPHON JET.

MADDEN'S PATENT.



M-66.



M-67.

The Buena Siphon Jet Closet with Adamantose Oval Bowl, Seat and Lid hinged to Bowl, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, Nickel Plated Tank Supports, 1¼-inch Flush Pipe and Protector, China Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

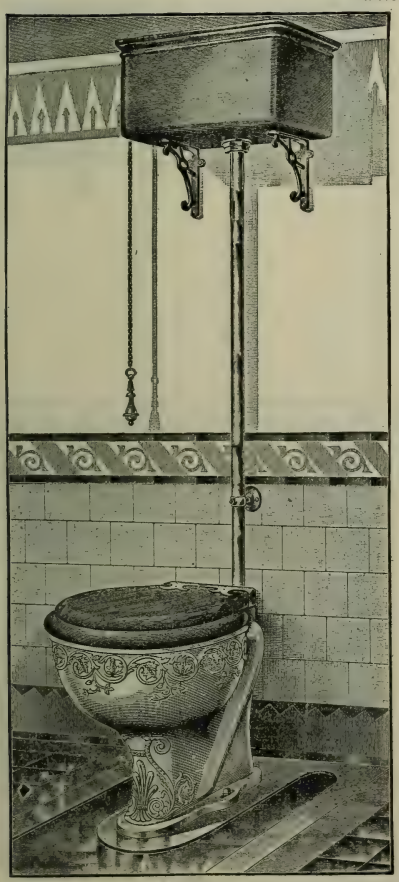
M-66. Embossed Closet, complete as described, with Tank and Seat of Quartered Oak,	$37.00
M-67. Plain Closet, complete as described, with Tank and Seat of Quartered Oak,	36.00
If with ⅜-inch I. P. Size N. P. Supply Pipe and Stop Cock, add	4.00
If with Sycamore, Cherry, White or Bird's Eye Maple, Red or White Mahogany woodwork, add	5.00
If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, as shown, add	8.00

The Tank furnished with the Buena Closet contains sufficient water for two successive flushes.

Some advantages of our Single Jet are that it is accessible for removing sediment or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

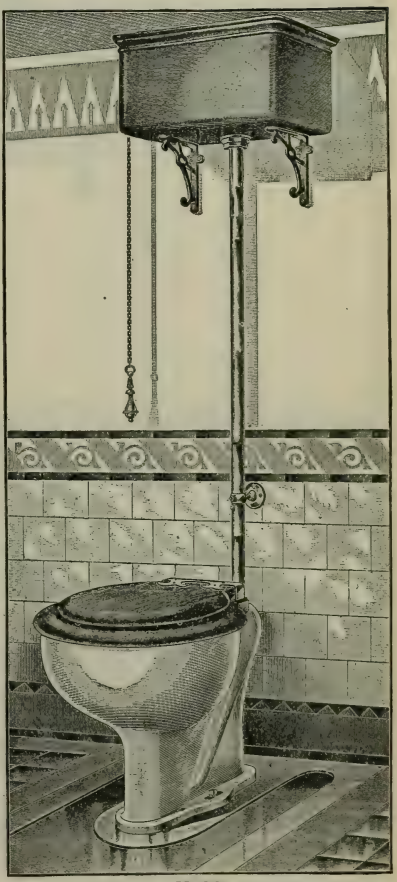
THE BUENA SIPHON JET.

MADDEN'S PATENT.



M-68.





M-69.

The Buena Siphon Jet Closet with Adamantose Oval Bowl, 1¼-inch reinforced Oak Seat and Lid with Ornamental Box Hinges, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Brackets, 1¼-inch Flush Pipe with Protector, China Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

M-68.	Embossed Closet, complete as described, with Tank and Seat of Quartered Oak,	$42.00
M-69.	Plain Closet, complete as described, with Tank and Seat of Quartered Oak,	41.00
	If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add	5.00
	If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, as shown, add	8.00
	If with Link Rods and Wall Guide, add	2.50

The Tank furnished with the Buena Closet contains sufficient water for two successive flushes.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

THE BUENA SIPHON JET.

MADDEN'S PATENT.



M-70.





M-71.

The Buena Siphon Jet Closet with Adamantose Oval Bowl, Wall Outlet, 1¼-inch Reinforced Oak Seat and Lid with Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Brackets, 1¼-inch Flush Pipe with Protector, Pull and Chain, Brass Flange, Bolts and Rubber Gasket.

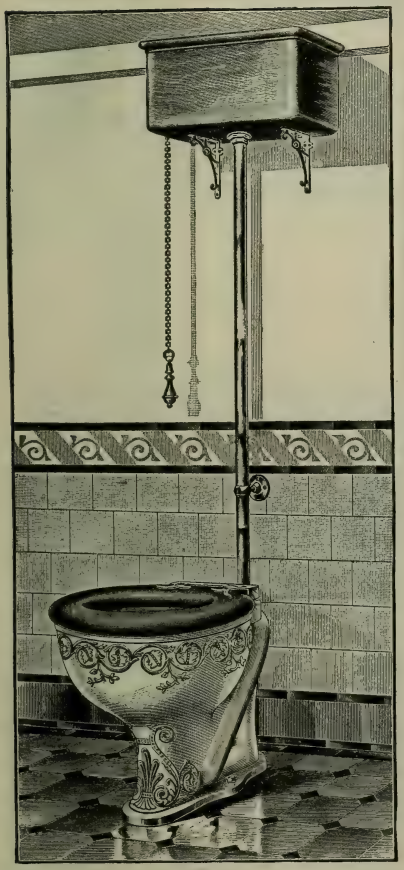
M-70.	Embossed Closet, complete as described, with Tank and Seat of Quartered Oak,	$44.00
M-71.	Plain Closet, complete as described, with Tank and Seat of Quartered Oak,	43.00
If with N. P. Supply Pipe and Stop Cock, ½-inch I. P. Size, add		5.00
If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, as shown, add		8.00
If with Link Rods and Wall Guide, add		2.50

The Tank furnished with the Buena Closet contains sufficient water for two successive flushes.

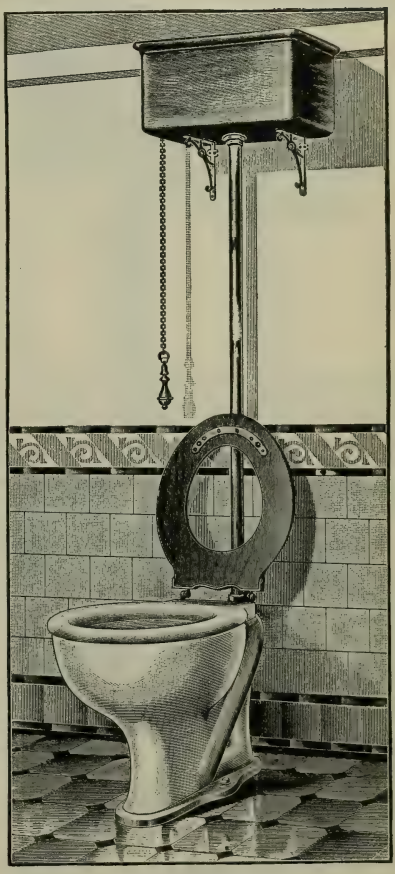
Some advantages of our single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

THE BUENA SIPHON JET.

MADDEN'S PATENT.



M-74.



M-75.

The Buena Siphon Jet Closet with Adamantose Oval Bowl, 1¼-inch reinforced Oak Seat with Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Brass Tank Brackets, 1¼-inch N. P. Flush Pipe with Protector, China Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

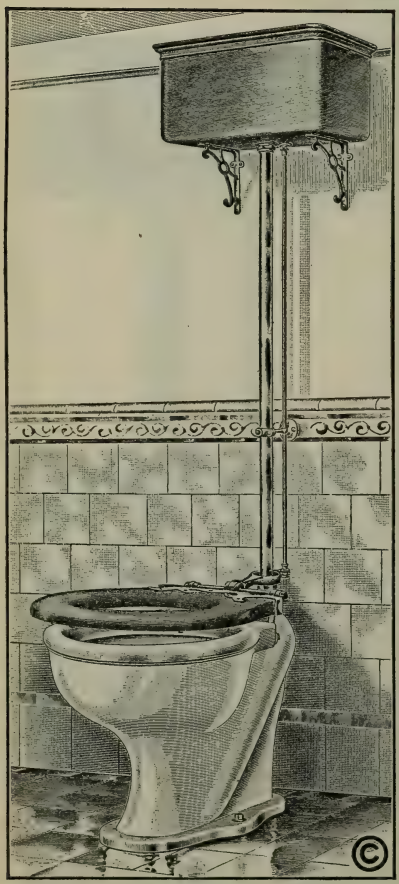
M-74.	Embossed Closet, complete as described,	$40.00
M-75.	Plain Closet, complete as described,	39.00
	If with Nickel Plated Supply Pipe and Stop Cock, ½-inch I. P. Size, add	5.00
	If with Link Rod and Wall Guide, add	2.50

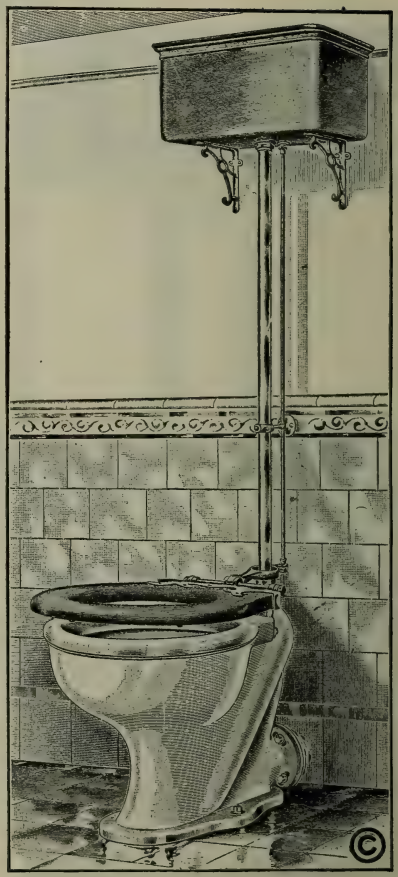
The Tank furnished with the Buena Closet contains sufficient water for two successive flushes.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein, and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

THE BUENA SIPHON JET.

MADDEN'S PATENT.





M-76.

The Buena Siphon Jet Closet with Adamantose Oval Bowl, 1½-inch Reinforced Oak Seat with Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18 x 10 x 10 inches inside, with Automatic Rod Action, N. P. Brass Tank Brackets, 1½-inch Flush Pipe with Protector, Brass Floor Flange, Bolts and Rubber Gasket, - - - - - - - $50.00

If with N. P. Supply Pipe and Stop Cock, I. P. Size, add - - - - - - ⅜-inch, $4.00; ½-inch, 5.00

M-77.

The Buena Siphon Jet Closet with Adamantose Oval Bowl and Wall Outlet, 1½-inch Reinforced Oak Seat with Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18 x 10 x 10 inches inside, with Automatic Rod Action, N. P. Brass Tank Brackets, 1½-inch N. P. Flush Pipe with Protector, Brass Flange, Bolts and Rubber Gasket, - - - - - $52.00

The Tank furnished with the Buena Closet contains sufficient water for two successive flushes.

Some advantages of our Single Jet are that it is accessible for removing lime or any foreign substance which might lodge therein and it cannot form a by-pass to Tank for sewer gas as, when Bowl contains any water at all, the seal is complete.

CLOW ADAMANTOSE CLOSETS.

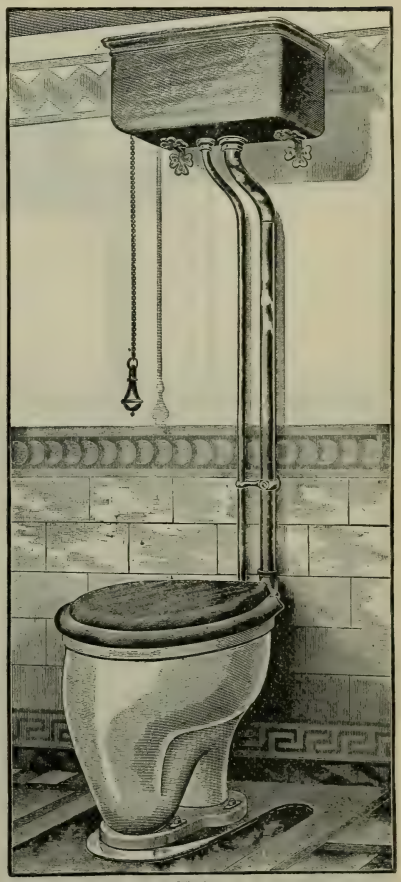
MARINA. MADDEN'S PATENT. TROPIC.



M-80.

The Marina Siphon Jet Closet with Adamantose Oval Bowl, Seat and Lid Hinged to Bowl, No. 4 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Supports, 1¼-inch Flush Pipe with Protector, Wood Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

Plain, ... each, $28.50
Embossed, ... each, 29.50



M-81.

The Tropic Front Outlet Washout Closet with Adamantose Bowl, with Seat and Lid Hinged to Bowl, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Supports, 1⅜-inch Flush Pipe with Protector, Wood Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

Price, ... each, $28.50

If with N. P. Supply Pipe and Stop Cock, ⅜-inch Iron Pipe Size, add 4.00

CLOW WASH-DOWN JET CLOSETS.

MADDEN'S PATENT.



M-82.



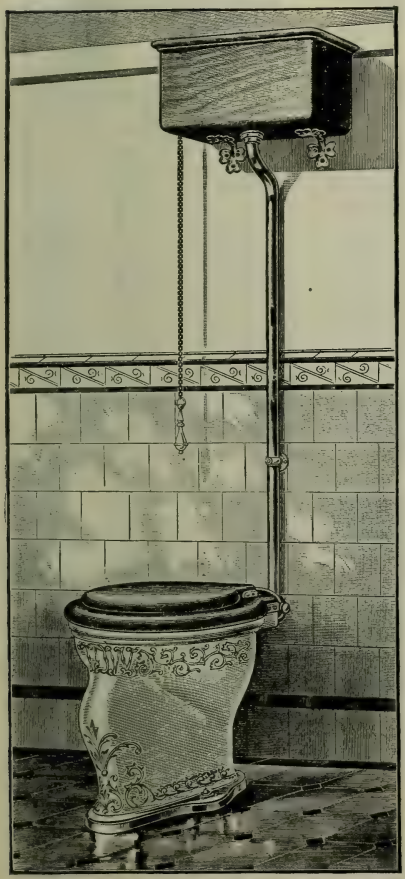
M-83.

Adamantose Oval Wash-down Closet with Jet, Seat and Lid hinged to Bowl, No. 4 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Brass Tank Supports, 1¼-inch Flush Pipe with Protector, Slip Joint, Wood Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

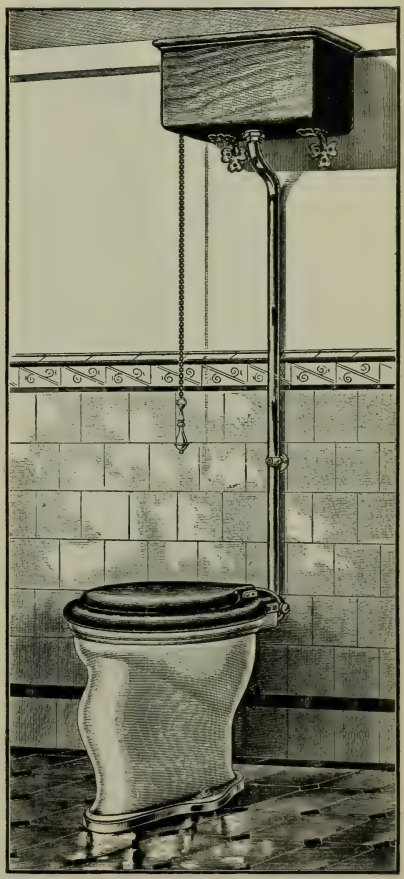
M-82.	Embossed Closet, complete as described,	$28.00
M-83.	Plain Closet, complete as described,	27 00
If with N. P. Supply Pipe and Stop Cock, ⅜-inch L. P. Size, add		4.00

CLOW DEEP SEAL SIPHON WASH-DOWN CLOSETS.

MADDEN'S PATENT.



M-90.



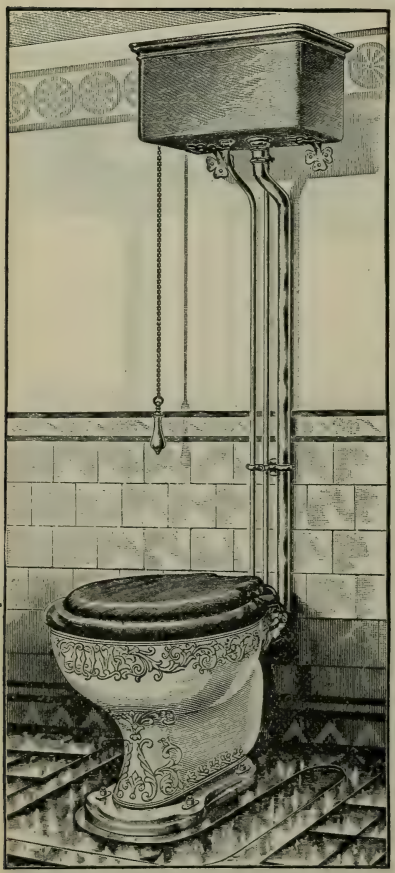
M-91.

Adamantose Oval Deep Seal Siphon Wash-down Closet with Seat and Lid hinged to Bowl, No. 5 Round Cornered Bent Wood Oak Tank, 17 x 8 x 10 inches inside, N. P. Tank Supports, 1¼-inch Flush Pipe with Protector, Slip Joint, Wood Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket.

M-90.	Embossed Closet, complete as described,	$26.00
M-91.	Plain Closet, complete as described,	25.00

CLOW DOUBLE TRAP SIPHON CLOSETS.

MADDEN'S PATENT.



M-102.



M-103.

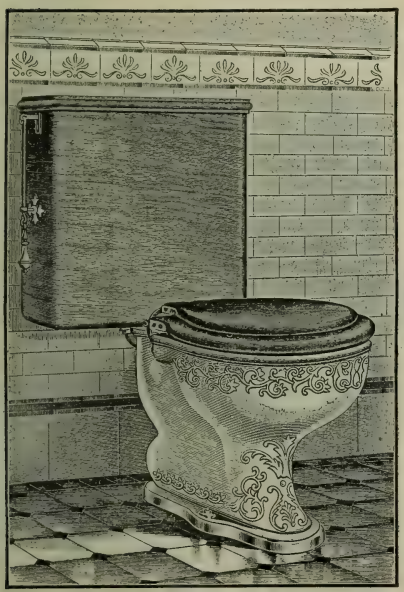
Adamantose Double Trap Siphon Closet with Seat and Lid hinged to Bowl, No. 1 Round Cornered Bent Wood Oak Tank, 21x10x14 inches inside, N. P. Brackets, 1¼-inch Flush Pipe, Slip Joint, ¾-inch Supply, I. P. Size, Air Pipes, China Pull and Chain, Pipe Holders with Buffer, Brass Floor Flange, Bolts and Rubber Gasket.

M-102.	Embossed Closet, complete as described, with Tank and Seat of Quartered Oak,	$59.00
M-103.	Plain Closet, complete as described, with Tank and Seat of Quartered Oak,	58.00
	If with Sycamore, Cherry, White or Bird's Eye Maple, Red or White Mahogany woodwork, add	5.00
	If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, as shown, add	8.00

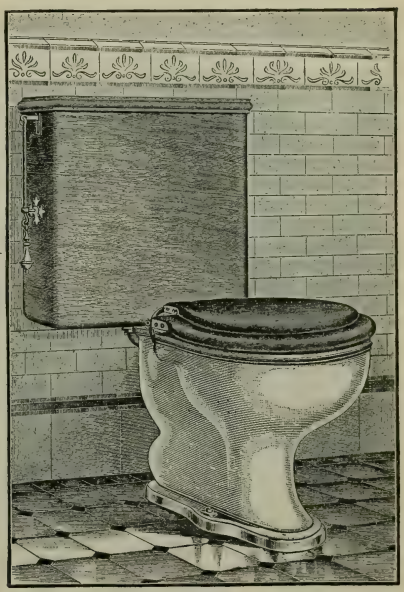
Tanks for operating the above Jet Closets contain sufficient water for two successive flushes.

CLOW SIPHON JET CLOSETS, LOW-DOWN TANK.

MADDEN'S PATENT.



M-110.



M-111.

Adamantose Oval Siphon Jet Closet with concealed Jet Arm, Seat hinged to Bowl, Bent Wood Low-down Operating Tank, 5½ x 18 x 20 inches inside, N. P. Brass Tank Supports, 2-inch N. P. Flush Connections, ¾-inch N. P. Supply Pipe and Stop, I. P. Size, Nickel Plated Rod and Guide with China Pull, Brass Floor Flange, Bolts and Rubber Gasket.

M-110. Embossed Closet, complete as described,	$47.00
M-111. Plain Closet, complete as described,	46.00
If Bowl is decorated, add	10.00

Tanks and Seats of Quartered Oak carried in stock. Sycamore, Walnut, Cherry, White or Bird's-eye Maple, Red or White Mohogany, extra, $6.00.

These Closets can be furnished with Rod acting Tank, as per M-115, if preferred. Prices on application.

These Closets are designed for locations where height of ceiling will not permit using the ordinary type of Water Closets. They can be set up and successfully operated in any room having not less than 4½ feet of wall space.

BUENA SIPHON JET CLOSETS, LOW-DOWN TANK.

MADDEN'S PATENT.



M-114.

The Buena Siphon Jet Closet with Adamantose Oval Bowl, 1¼-inch Reinforced Oak Seat with Lid, Bent Wood Low-down Operating Tank, 5½x18x20 inches inside, N. P. Brass Tank Supports, 2-inch N. P. Flush Connection, ⅝-inch N. P. Supply Pipe and Stop, I. P. Size, N. P. Rod and Rod Guide with China Pull, Brass Floor Flange, Bolts and Rubber Gasket, $36.00



M-115.

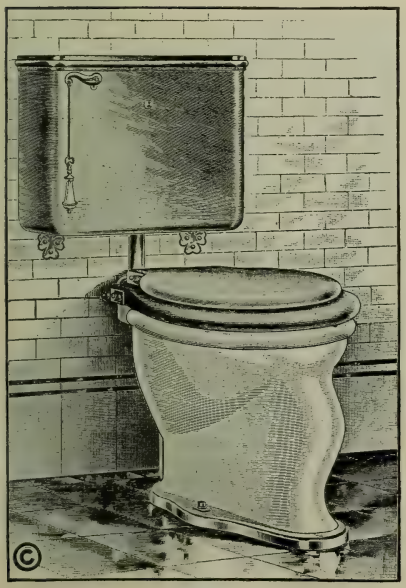
The Buena Siphon Jet Closet with Adamantose Oval Bowl, 1¼-inch Reinforced Oak Seat with Ornamental Box Hinge, Bent Wood Low-down Operating Tank, 5½x18x20 inches inside, with Automatic Rod Action, N. P. Brass Tank Supports, 2-inch N. P. Flush Connection, ⅝-inch N. P. Supply Pipe and Stop Cock, I. P. Size, Brass Floor Flange, Bolts and Rubber Gasket, $48.00

Tanks and Seats of Quartered Oak carried in stock. Sycamore, Cherry, White or Bird's Eye Maple, Red or White Mahogany, extra, - $6.00

These Closets are designed for locations where height of ceiling will not permit using the ordinary type of Water Closets. They can be set up and successfully operated in any room having not less than 4½ feet of wall space.

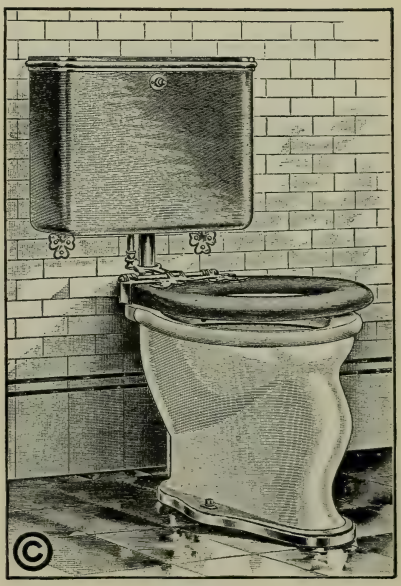
CLOW WASH-DOWN JET CLOSETS, LOW-DOWN TANK.

MADDEN'S PATENT.



M-116.

Adamantose Oval Wash-down Closet with Jet, 1¼-inch Reinforced Oak Seat and Lid Hinged to Bowl, Bent Wood Low-down Operating Tank, 5½x18x20 inches inside, N. P. Brass Tank Supports, 2-inch N. P. Flush Connection, ⅜-inch N. P. Supply Pipe and Stop Cock, I. P. Size, N. P. Rod and Rod Guide with China Pull, Brass Floor Flange, Bolts and Rubber Gasket, $36.00



M-117.

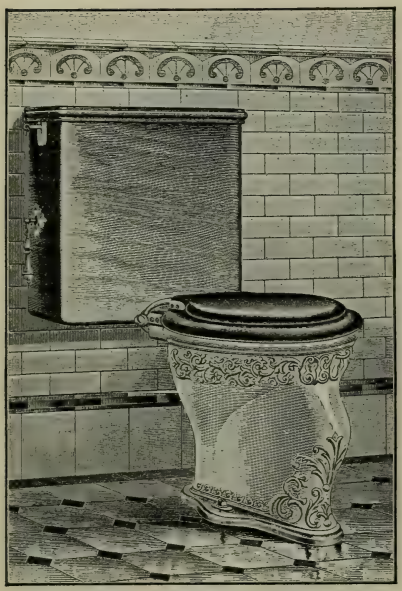
Adamantose Oval Wash-down Closet with Jet, 1¼-inch Reinforced Oak Seat with Ornamental Box Hinge, Bent Wood Low-down Operating Tank, 5½x18x20 inches inside, with Automatic Rod Action, N. P. Brass Tank Supports, 2-inch N. P. Flush Connection, ⅜-inch N. P. Supply Pipe and Stop Cock, I. P. Size, Brass Floor Flange, Bolts and Rubber Gasket, . . $42.00

Tanks and Seats of quartered Oak carried in stock. Sycamore, Cherry, White or Bird's-eye Maple, Red or White Mahogany, extra, ... $6.00

These Closets are designed for locations where height of ceiling will not permit using the ordinary type of Water Closets. They can be set up and successfully operated in any room having not less than 4½ feet of wall space.

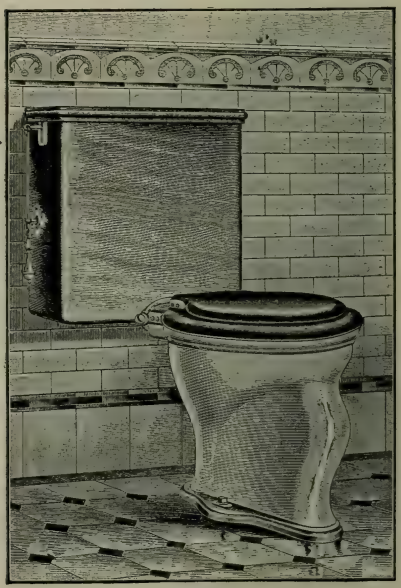
CLOW DEEP SEAL SIPHON WASH-DOWN CLOSETS, LOW-DOWN TANK.

MADDEN'S PATENT.



M-118.





M-119.

Adamantose Oval Deep Seal Siphon Closet with Seat and Lid hinged to Bowl, Bent Wood Low-down Operating Tank, 5¼ x 18 x 20 inches inside, N. P. Brass Tank Supports, 2-inch N. P. Flush Connection, ¾-inch N. P. Supply Pipe and Stop, I. P. Size, Nickel Plated Rod and Rod Guide with Wood Pull, Brass Floor Flange, Bolts, and Rubber Gasket.

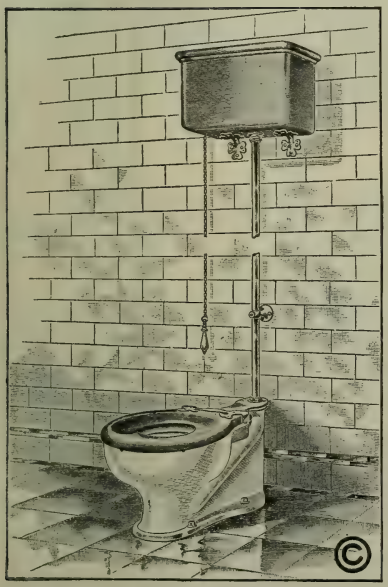
M-118. Embossed Closet, complete as described, ... $35.00
M-119. Plain Closet, complete as described, ... 34.00

Tanks and Seats of Quartered Oak carried in stock. Sycamore, Cherry, Walnut, White or Bird's Eye Maple, Red or White Mahogany, extra, $6.00.

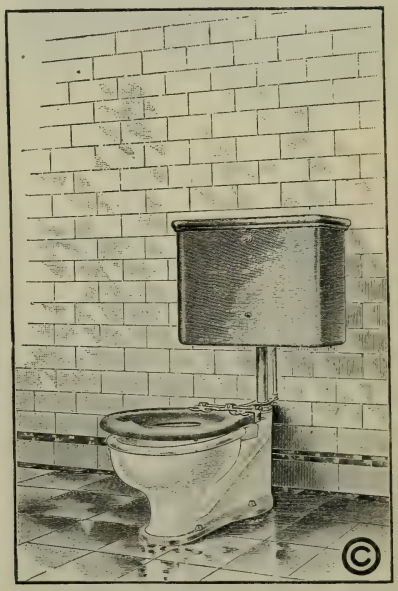
These Closets are designed for locations where the height of ceiling will not permit using the ordinary type of Water Closets. They can be set up and successfully operated in any room having not less than 4½ feet of wall space.

THE ENFANTA SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-120.



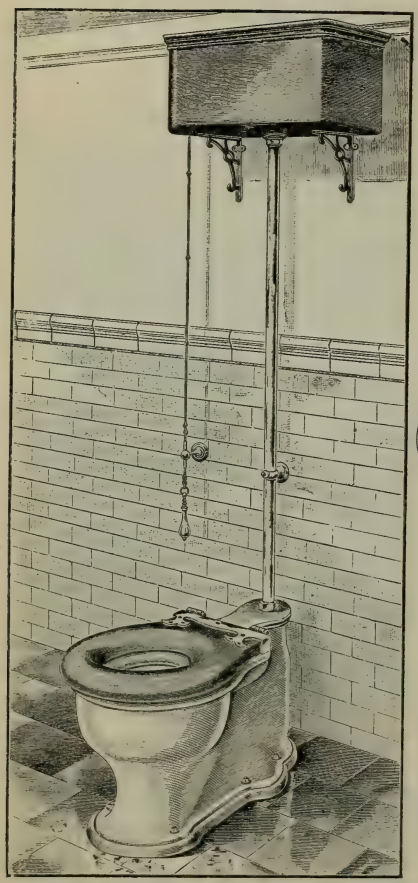
M-121.

The Enfanta Adamantose Closet with Concealed Jet Arm, Oak Saddle Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 5 Round Cornered Bent Wood Oak Tank, 17x8x10 inches inside, N. P. Tank Supports, 1⅛-inch N. P. Flush Pipe with Protector, N. P. Chain and China Pull, Brass Floor Flange, Bolts and Rubber Gasket, ... $42.00

The Enfanta Adamantose Closet with Concealed Jet Arm, Oak Saddle Seat hinged to Bowl, N. P. Ornamental Box Hinge, Bent Wood Low Down Operating Tank, with Automatic Rod Action, N. P. Tank Supports, 2-inch N. P. Flush Connection, ¾-inch N. P. Supply Pipe and Stop Cock, I. P. Size, Brass Floor Flange, Bolts and Rubber Gasket, ... $50.00

The Enfanta is the first thoroughly successful Siphon Jet Closet ever made for Kindergartens and other Institutions for very small children, although there has long been a demand for this class of fixtures. It is absolutely sanitary and much more hygienic for use of small children than the larger closets. The Bowl is only 8¾ inches high in front, being a reproduction in miniature of our standard height Siphon Jets. The lines of the Bowl and specially designed Seat are very attractive and the whole combination a handsome one. By no means the least attractive feature is its operation, the action being perfect and the strong flush in every way equaling the efficiency of the well-known Standard Madden Fixtures.

THE KOREA JUVENILE CLOSETS.



M-122.

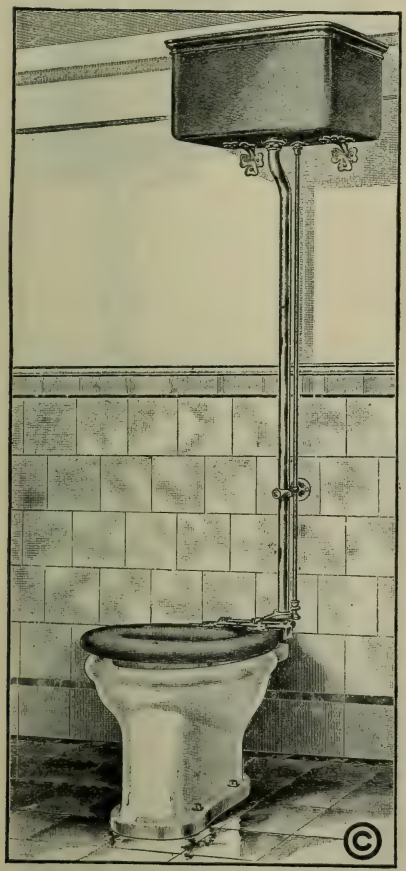
Korea Juvenile Adamantose Closet with concealed Jet Arm and 3½-inch Siphon Limb, 1½-inch reinforced Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 2 Round Cornered Bent Wood Oak Tank, 21x10x14 inches inside, extra heavy Tank Brackets, 1½-inch Nickel Plated Flush Pipe with Protector, Wall Guide, Link Rods and Pull, Brass Floor Flange, Bolts and Rubber Gasket, - - - - - $52.00

If with N. P. Supply Pipe and Stop Cock, ¾-inch I. P. Size, add - - - - -

CLOW AUTOMATIC JUVENILE CLOSETS.

MADDEN'S PATENT.

JUVENIS.



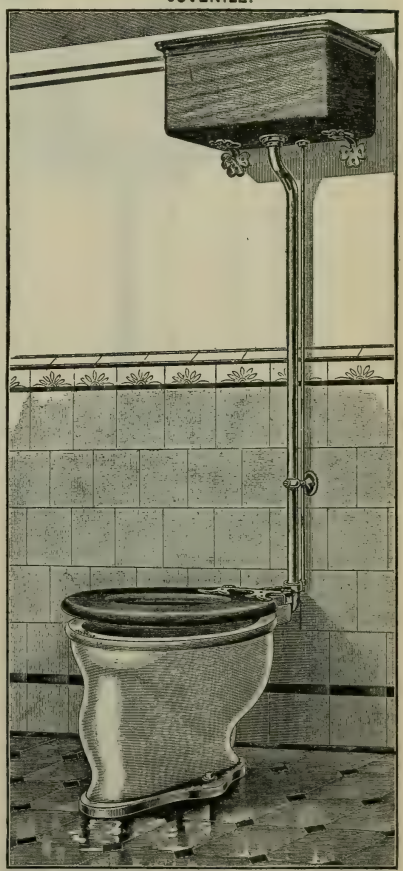
M-124.

Juvenis Adamantose Juvenile Wash-down Closet, Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18 x 10 x 10 inches inside, with automatic Rod Action, N. P. Tank Supports, 1⅛-inch Flush Pipe with Protector, Slip Joint, Brass Floor Flange, Bolts and Rubber Gasket, - - - - - - - $50.00

If with N. P. Supply Pipe and Stop Cock, ⅜-inch I. P. Size, add - - - - - - - - - - 4.00

Sole Manufacturers

JUVENILE.



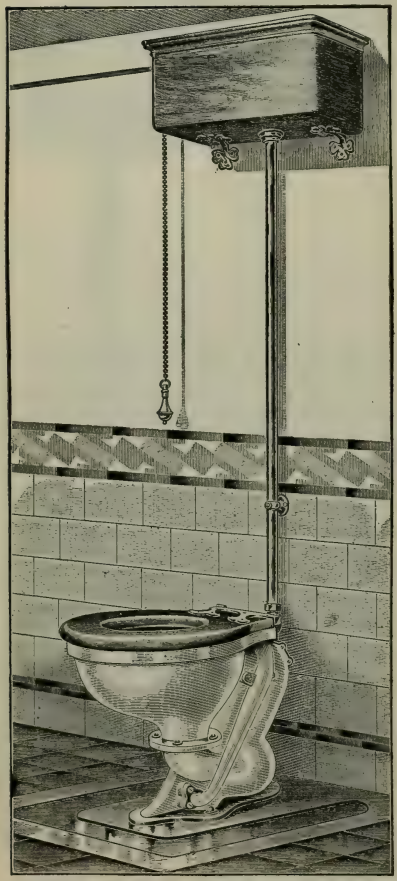
M-125.

Juvenile Adamantose Oval Deep Seal Closet with Jet Action, Oak Seat attached to Bowl, N. P. Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18 x 10 x 10 inches inside, with automatic Rod Action, N. P. Tank Supports, 1⅛-inch N. P. Flush Pipe with Protector, Slip Joint, Brass Floor Flange, Bolts and Rubber Gasket, - - - - - $44.00

The Juvenis and Juvenile Closets are made of Clow Adamantose, vitreous throughout, are heavy and substantial but of Juvenile height, being intended for use in Primary Schools and Children's Institutions.

CLOW IRON ENAMELED SIPHON JET CLOSETS.

MADDEN'S PATENT.



M-126. CHAIN PULL.

Iron Siphon Jet Closet, Enameled inside and outside, Reinforced Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Brackets, 1⅜-inch Flush Pipe with Protector, Slip Joint, Wood Pull and Chain, Screws and Washers, . $39.00

If with N. P. Supply Pipe and Stop Cock, I. P. Size, add . . . . . ⅜-inch, 4.00; ½-inch, 5.00

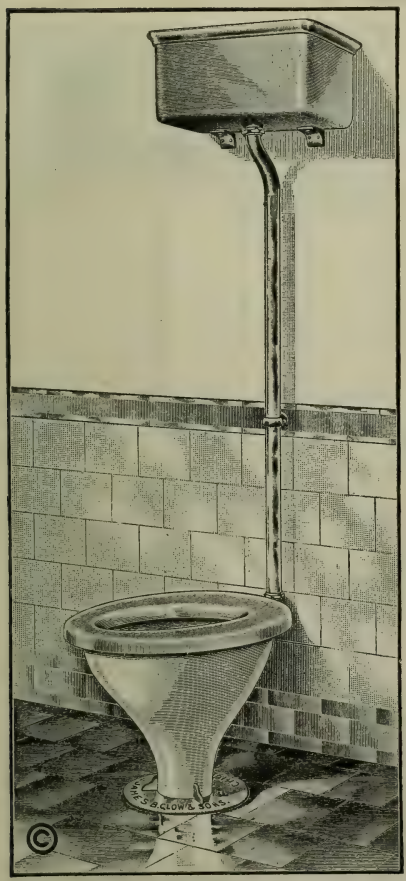


M-127. SEAT OPERATING.

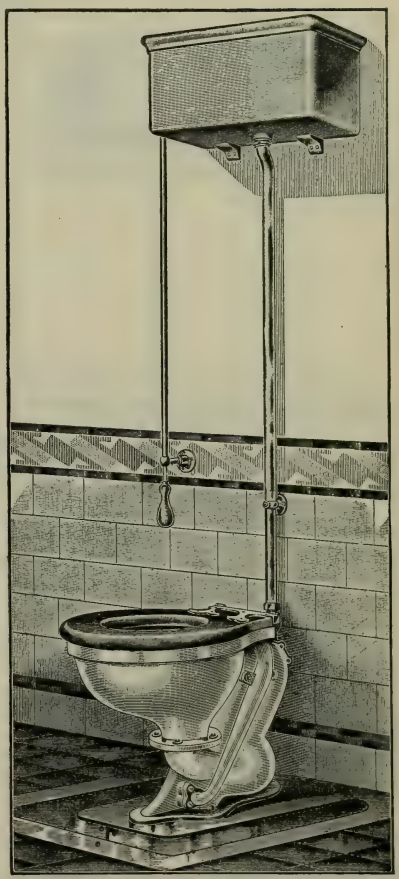
Iron Siphon Jet Closet, Enameled inside and outside, Reinforced Oak Seat hinged to Bowl, N. P. Ornamental Box Hinge, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, with Automatic Rod Action, N. P. Tank Brackets, 1⅜-inch Flush Pipe with Protector, Slip Joint, Screws and Washers, $48.00

CLOW ENAMELED IRON CLOSETS.

MADDEN'S PATENT.







M-131.

Iron Long Oval Flushing Rim Hopper Closet, Enameled inside and outside, with Enameled Iron Seat, No. 3 Automatic Iron Tank, 18x10x10 inches inside, Enameled inside and outside, Iron Tank Supports, 1⅛-inch N. P. Flush Pipe with Holder, Slip Joint, Screws and Washers, - - - - - - - - $29.00

If with Clow Non-condensing Tank Enamel, add - - - - - - - - - - - - - - - - 3.00

M-130.

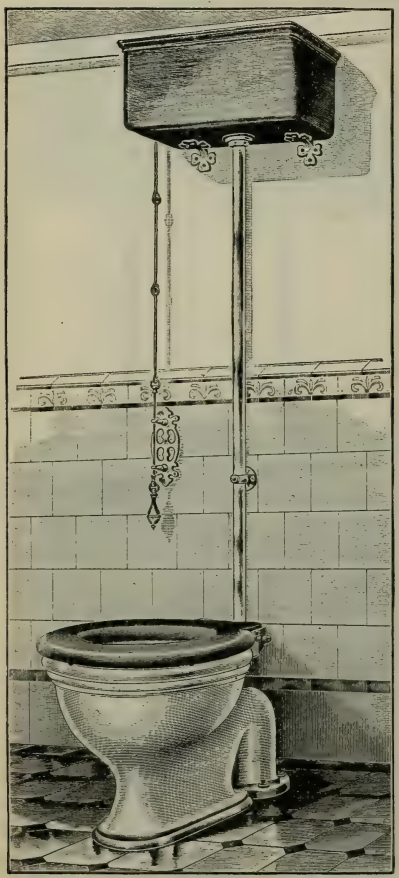
Iron Siphon Jet Closet, Enameled inside and outside, Oak Seat with N. P. Ornamental Box Hinge, No. 3 Iron Tank, 18x10x10 inches inside, Enameled inside and outside, Iron Tank Supports, 1⅛-inch N. P. Flush Pipe with Protector, Wall Guide, N. P. Pull, Rod and Protecting Tube, Screws and Washers, - $37.00

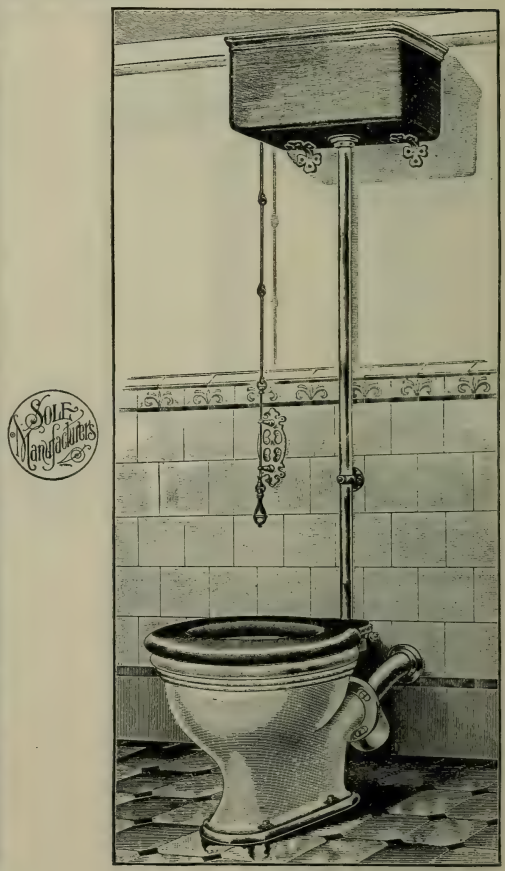
We guarantee Clow Non-condensing Tank Enamel, when applied to Iron Tanks, to prevent atmospheric condensation (commonly called sweating) on outside of Tank.

These Closets are of great strength, and owing to their simple construction are especially adapted for use in fire-proof and all public buildings. Our Iron Tanks are especially constructed to allow for the use of salt water. We therefore recommend these fixtures for use near the seacoast. They are also extensively used for tropical countries.

CLOW ADAMANTOSE WASH-DOWN CLOSETS.

MADDEN'S PATENT.





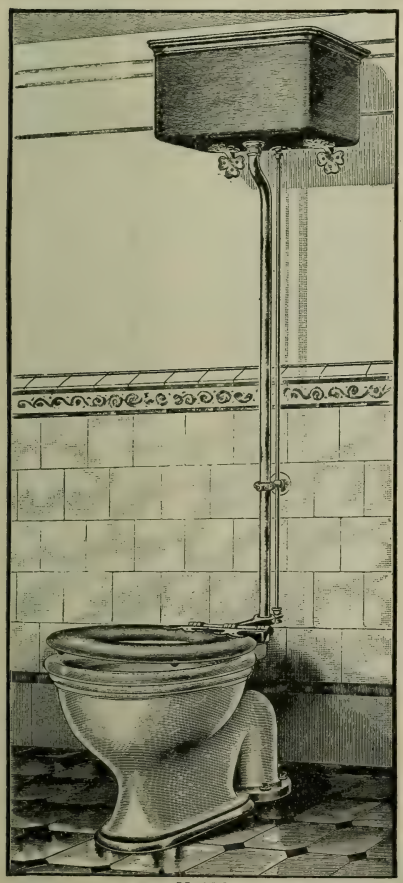
M-134.

Adamantose Oval Wash-down Closet, Seat hinged to Bowl, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Supports, 1⅜-inch Flush Pipe with Protector, Slip Joint, Wall Guide, Link Rod and Pull, Brass Floor Flange, Bolts and Rubber Gasket, - - - - - - - - - $49.00

If without Wall Guide, deduct - - - - - - - - -

CLOW ADAMANTOSE WASH-DOWN CLOSETS.

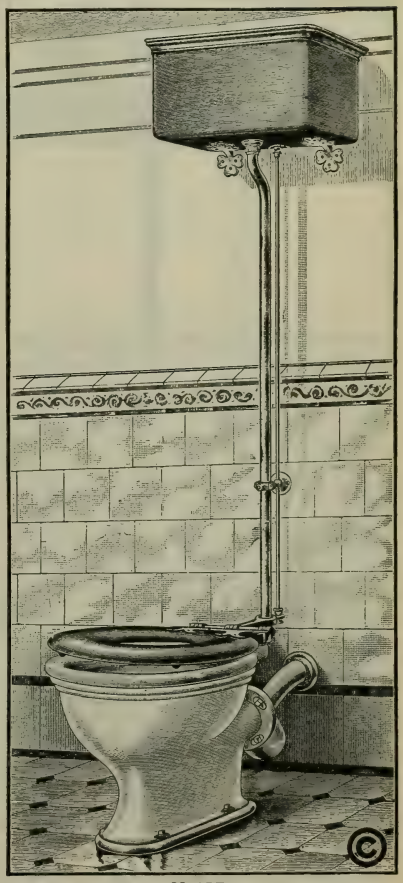
MADDEN'S PATENT.



M-136.

Adamantose Oval Wash-down Closet with Reinforced Oak Seat hinged to Bowl, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, with Automatic Rod Action, N. P. Tank Supports, 1⅛-inch Flush Pipe with Protector, Slip Joint, Brass Floor Flange, Bolts and Rubber Gasket, - - - $56.00

If with N. P. Supply Pipe and Stop Cock, I. P. Size, add - - - - - - - ⅜-inch, 4.00; ½-inch, 5.00

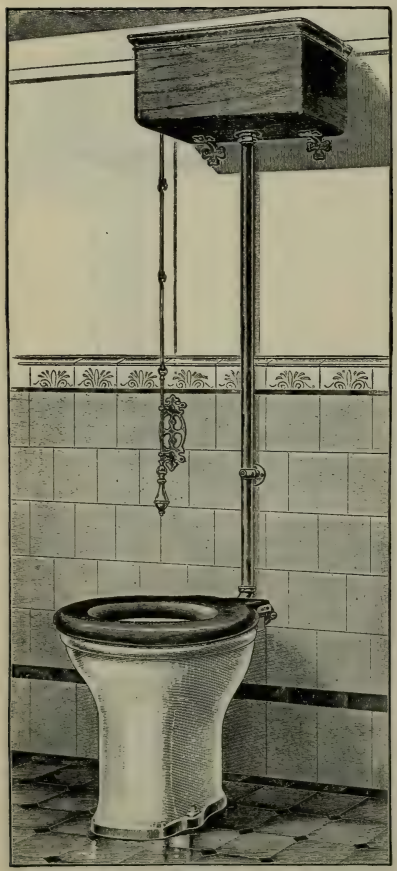


M-137.

Adamantose Oval Wash-down Closet with Wall Outlet, Reinforced Oak Seat hinged to Bowl, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, with Automatic Rod Action, N. P. Tank Supports, 1⅛-inch Flush Pipe with Protector, Slip Joint, Brass Flange, Bolts and Rubber Gasket, $57.00

These Closet Bowls are of quadruple strength and, owing to their simple construction, are especially adapted for use in fire-proof and all public buildings. The thickness of this material insures great durability, which is desirable where Closets are subjected to hard use and where earthenware fixtures are required.

CLOW ADAMANTOSE WASH-DOWN CLOSETS.



M-142.

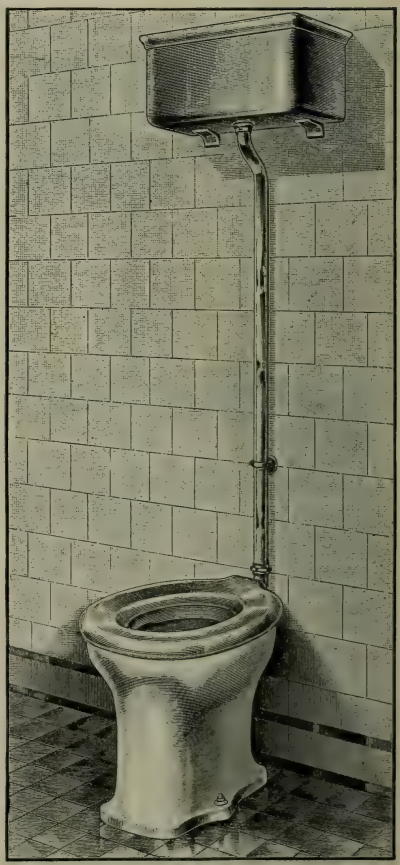
Adamantose Wash-down Closet, Seat hinged to Bowl, No. 3 Round Cornered Bent Wood Oak Tank, 18x10x10 inches inside, N. P. Tank Supports, 1⅛-inch Flush Pipe with Protector, Slip Joint, N. P. Wall Guide, Link Rod and Pull, Brass Floor Flange, Bolts and Rubber Gasket, ... $45.00

If without Wall Guide, deduct 2.75

If with Ash Tank and N. P. Iron Tank Supports, deduct 2.50

If with N. P. Supply Pipe and Stop Cock, I. P. Size, add . . . . . ⅜-inch, 4.00; ½-inch, 5.00

Sole Manufacturers



M-145.

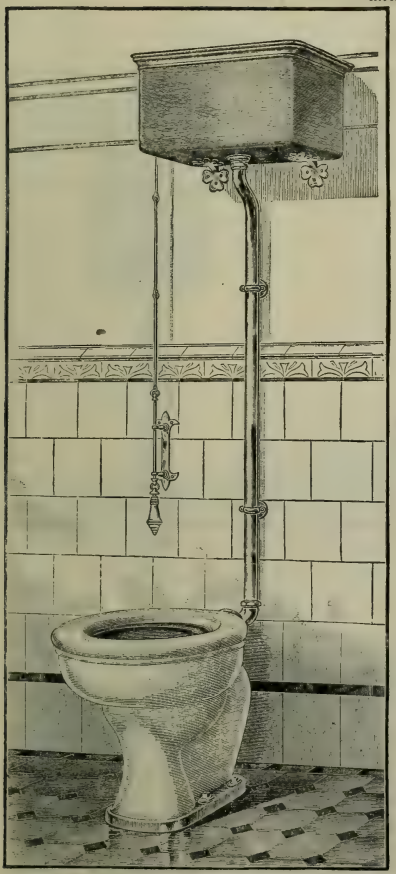
Equato Adamantose Wash-down Closet, Bowl and Seat in one piece, No. 3 Automatic Iron Tank, 18x10x10 inches inside, enameled inside and outside, Iron Tank Supports, 1⅛-inch Flush Pipe with Protector, Slip Joint, Brass Floor Flange, Bolts and Rubber Gasket, $40.00

If with Clow Non-condensing Tank Enamel, add 3.00

Our Equato Closet has been designed by us to meet the requirements of tropical countries. The automatic action is perfect and all materials suited to tropical temperatures. The Tank is specially constructed to be used with salt water when desirable to do so, and the Clow Non-condensing Tank Enamel prevents condensation on outside of Tank. The Enamel may also be applied to Flush Pipe with equally good results.

CLOW ADAMANTOSE CLOSETS.

MADDEN'S PATENT.

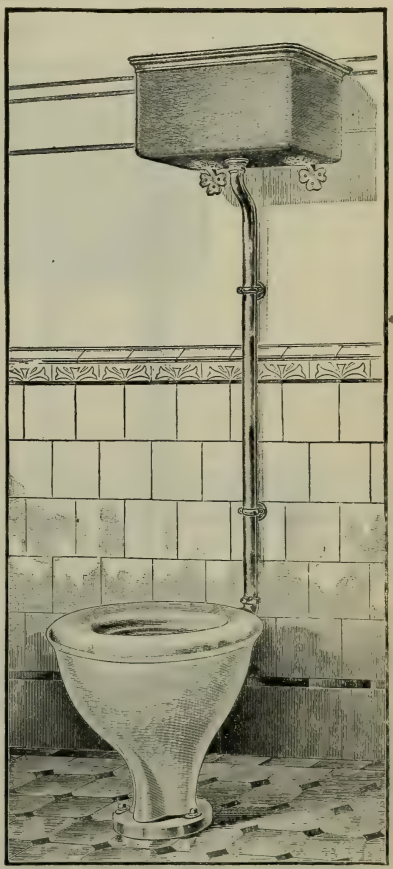


M-150.

Adamantose Wash-down Closet, Bowl and Seat in one piece, No. 3 Round Cornered Bent Wood combination Pull and Automatic Oak Tank, 18x10x10 inches inside, N. P. Tank Supports, 1⅜-inch Flush Pipe with Holder, Slip Joint, Wall Guide, Link Rod and Pull, Brass Floor Flange, Bolts and Rubber Gasket, . $46.00

If without Wall Guide, deduct 2.50

If with N. P. Supply Pipe and Stop Cock, I. P. Size, add . . . . . ⅜-inch, 4.00; ½-inch, 5.00



M-151.

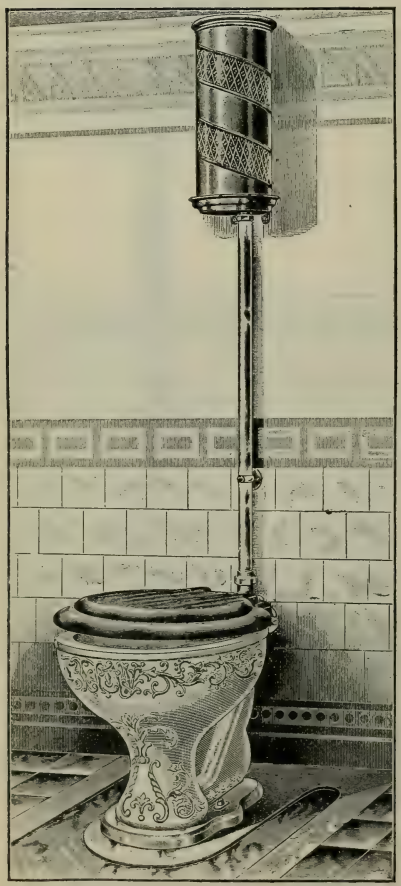
Adamantose Oval Flushing Rim Hopper Closet, Bowl and Seat in one piece, No. 3 Round Cornered Bent Wood Automatic Oak Tank, 18x10x10 inches inside, N. P. Tank Supports, 1⅜-inch Flush Pipe with Holder, Slip Joint, Wall Guide, Link Rod and Pull, Brass Floor Flange, Bolts and Rubber Gasket, . . $35.00

These Closet Bowls are of quadruple strength and, owing to their simple construction, are especially adapted for use in fire-proof and all public buildings. The thickness of this material insures great durability, which is desirable where Closets are subjected to hard use and where earthenware fixtures are required.

These Closets are adapted for use in Hospitals, Lunatic Asylums, Barracks, Railway Stations, Factories and other public places. The absence of woodwork insures cleanliness and prevents contagion. Where floors are of cement or tile and provided with drain, Closets can be thoroughly cleansed by using a hose.

CLOW AUTOMATIC SIPHON JET CLOSETS.

(MADDEN'S PATENT.)



M-158.



M-159.

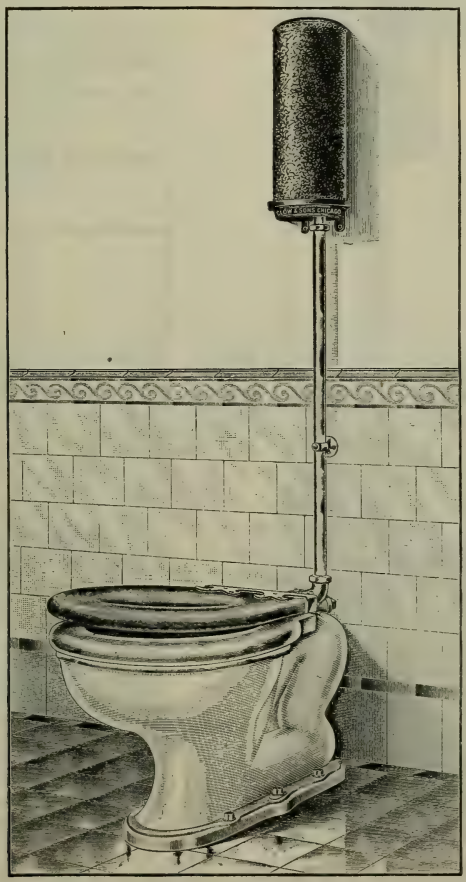
Includes Oval Siphon Jet Closet, with Automatic Valve, Seat and Lid attached to Bowl, Galvanized Iron Closed Tank incased in Nickel-plated Ornamental Brass Cover, Nickel-plated Brackets, and Flush Pipe with Protector, Brass Floor Flange, Bolts, and Rubber Gasket.

M-158.	Embossed Closet, complete as described	$47.00
M-159.	Plain Closet, complete as described	46.00
	If without Nickel-plated Ornamental Brass Tank Cover, deduct	4.00

These Closets will work successfully on any pressure over 20 pounds.
Size of Flush Pipes, 1¼ inches.

CLOW CELTIC AUTOMATIC SIPHON JET CLOSET.

MADDEN'S PATENT.



M-160.

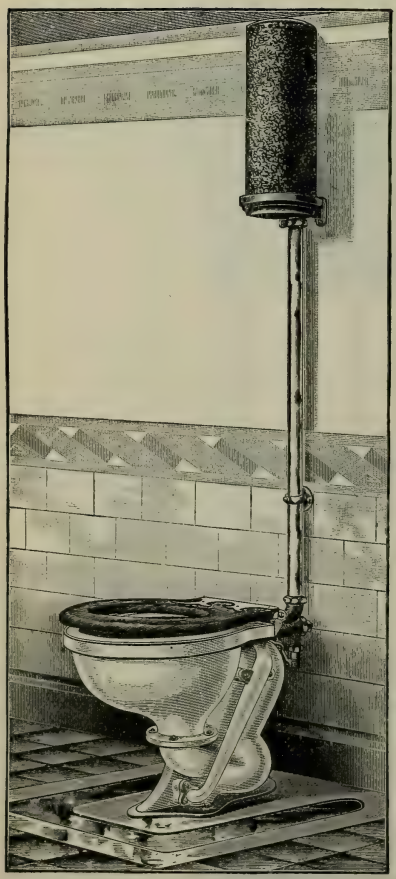
Adamantose Porcelain Bowl with concealed Jet and 3¼-inch Siphon Limb, 1½-inch reinforced Oak Seat attached to Bowl, Automatic Valve, Galvanized Iron Closed Tank, 1⅛-in. N. P. Flush Pipe with Protector, Brass Floor Flange, Bolts and Rubber Gasket.

M-160. Complete as described, - - - - - - - - - - - - - - - - $70.00

The Clow Celtic Siphon Jet Closets are specially designed for use in Public Buildings, Institutions, Barracks, Railway Stations, etc.

CLOW AUTO-JET ENAMELED IRON CLOSETS.

MADDEN'S PATENT.



M-166.

Iron Siphon Jet Closet, Enameled all over, with Automatic Valve, Seat hinged to Bowl, N. P. Ornamental Box Hinge, Galvanized Iron Closed Tank, Japanned Brackets and 1⅜-inch Nickel Plated Flush Pipe with Protector, Screws and Washers.

M-166. Complete as described, - - - $39.00



M-168.

Iron Siphon Jet Low-down Closet, Enameled all over, with Automatic Valve, Seat hinged to Bowl, N. P. Ornamental Box Hinge, Galvanized Iron Closed Tank, Japanned Brackets and 1⅜-inch Nickel Plated Flush Pipe, Screws and Washers.

M-168. Complete as described, - - - $39.00

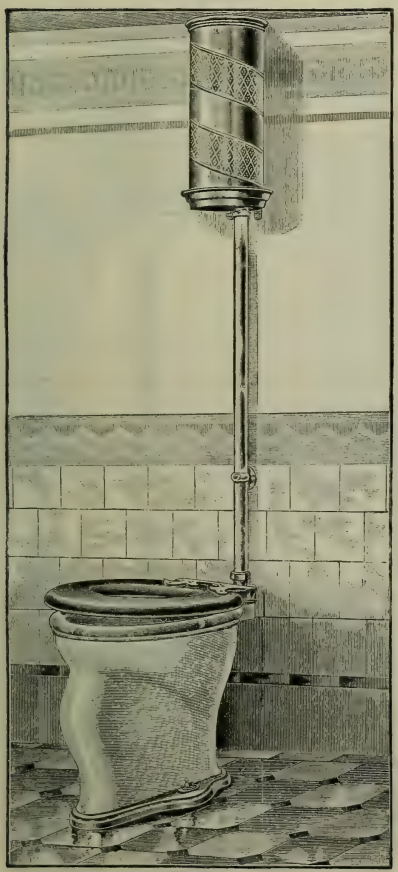
Without any exception, this is the best Water Closet made for use in Schools, Factories, Stores, Saloons, or where the fixture is liable to receive hard usage.

These Closets will operate successfully on any pressure over 20 pounds.

CLOW AUTOMATIC WASH-DOWN CLOSETS.

MADDEN'S PATENT.

AUTO-MARINE.



M-187.

Adamantose Oval Deep Seal Wash-down Siphon Closet with Automatic Valve, Oak Seat with Ornamental Box Hinge, Galvanized Iron Closed Tank encased in N. P. Ornamental Brass Cover, N. P. Brackets, 1⅜-inch N. P. Flush Pipe with Protector, Brass Floor Flange, Bolts and Rubber Gaskets, - - - - $38.00

M-187. If without N. P. Ornamental Brass Tank Cover, deduct - - - - - - - - - - - - 4.00



JUVENILE



M-188.

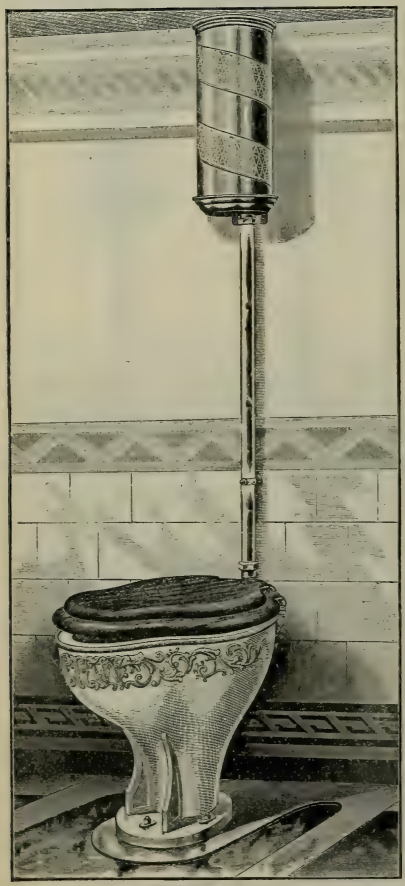
Juvenile Adamantose Oval Deep Seal Closet with Jet Action, Oak Seat attached to Bowl, N. P. Ornamental Box Hinge, Automatic Galvanized Iron Closed Tank, Japanned Tank Bracket, 1⅜-inch N. P. Flush Pipe with Protector, Slip Joint, Brass Floor Flange, Bolts and Rubber Gasket, - - - - - $33.00

These Closets will work successfully on any pressure over 20 pounds.

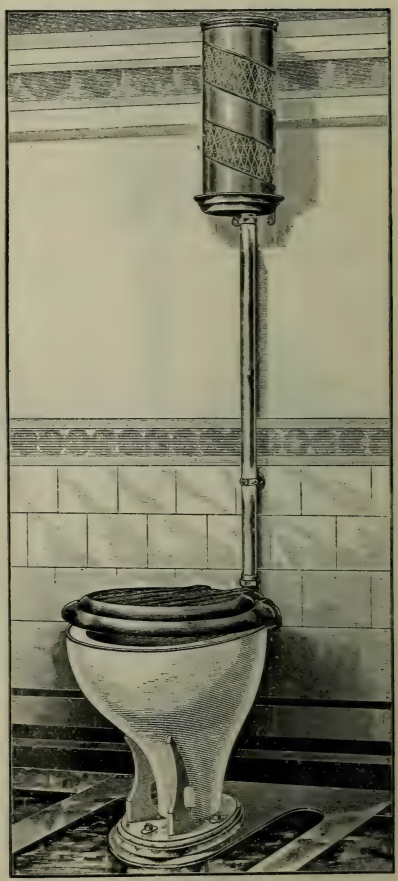
M-188. Juvenile Closet, made of our Adamantose, vitreous throughout, is heavy and substantial but of Juvenile height, being intended for use in Primary Schools and Children's Institutions.

CLOW AUTOMATIC HOPPER CLOSETS.

(MADDEN'S PATENT.)



M-194.



M-195.

M-194 includes Embossed Tall Lipped Flushing Rim Hopper, with Automatic Valve, Seat and Lid attached to Bowl. Galvanized Iron Closed Tank, incased in Nickel Plated Ornamental Brass Cover, Nickel Plated Brackets and Flush Pipe, with Protector, Brass Floor Flange, Bolts, and Gasket.

M-195 includes Plain Tall Oval Flushing Rim Hopper, with Automatic Valve, Seat and Lid attached to Bowl, Galvanized Iron Closed Tank, incased in Nickel Plated Ornamental Brass Cover, Nickel Plated Brackets and Flush Pipe, with Protector, Brass Floor Flange, Bolts, and Gasket.

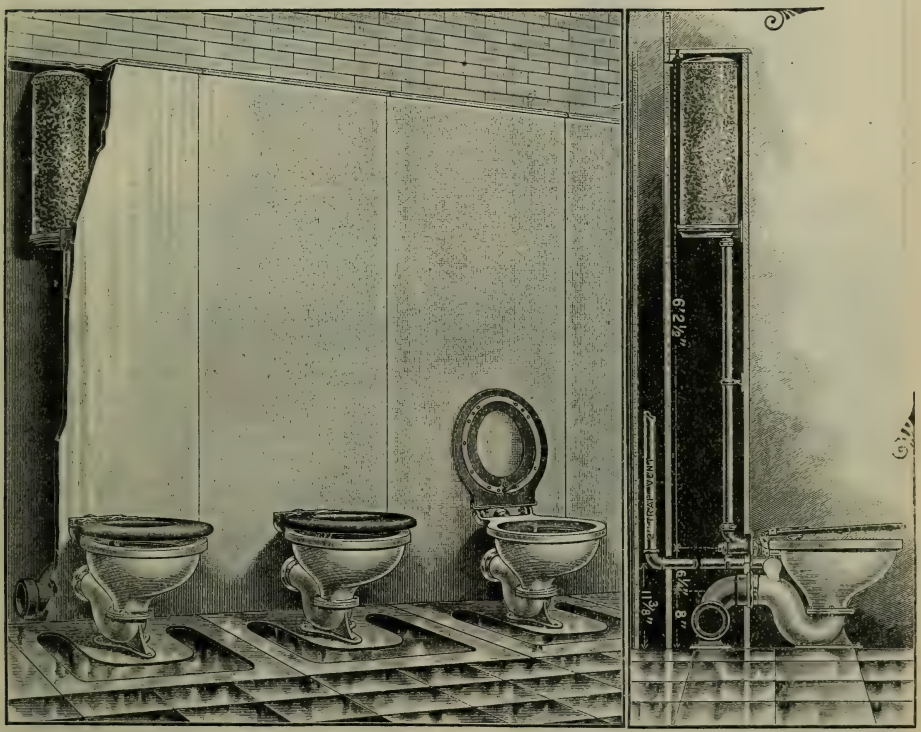
M-194. Complete as described	$35.00
M-195. Complete as described	30.00
If without Nickel Plated Ornamental Brass Tank Cover, deduct	4.00

Size of Flush Pipes, 1¼ inches.

CLOW'S AUTOMATIC IRON WASH-DOWN CLOSETS.

(MADDEN'S PATENT.)

FOR HOSPITALS, ASYLUMS, SCHOOLS AND OTHER PUBLIC BUILDINGS.



M-200.

Automatic Iron Wash-Down Closet, Enameled inside and outside, Automatic Valve and Reinforced Seat attached to Bowl, Galvanized Closed Tank, Flush Pipe and Holders. Asphalted Iron Drainage Connection, with adjustable Standard.

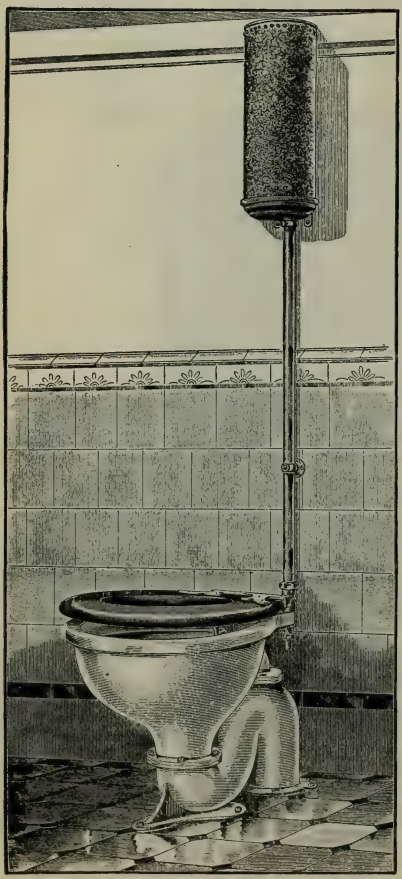
Price, each Closet complete as described, - - - - - - - - - - - - - - - - $35.00

The Soil Pipe to be run in front of wall, or back of partition, above the floor, as is often necessary in fireproof and other buildings. The inlet of drainage connections being cast on different angles, and made adjustable, the necessary pitch can be obtained for any number of closets.

Height of Closet, 17 inches; height from floor to top of Tank, 7 feet and 5 inches; distance from partition to front of Closet, 22 inches; Closets, center to center, 30 inches. Can furnish with other centers when so ordered, but distance given is Standard.

CLOW'S AUTOMATIC HOPPER CLOSETS.

(MADDEN'S PATENT.)



M-207.



M-208.

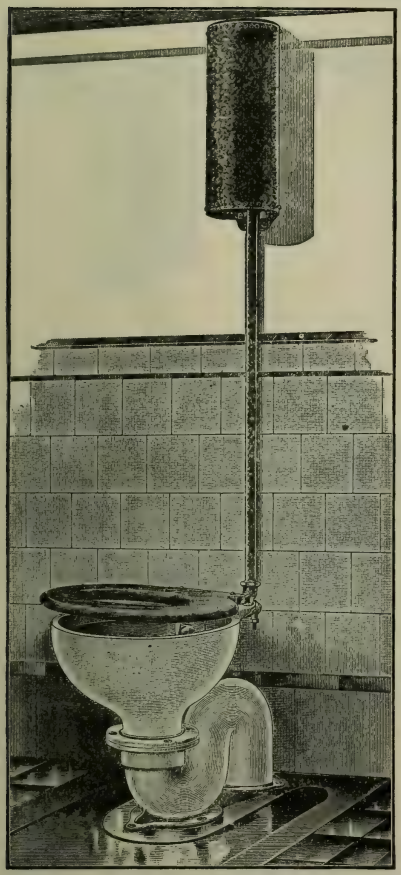
Includes Iron Flushing Rim Hopper, Enameled Inside and Outside, Automatic Valve and Seat attached to Bowl, Galvanized Iron Closed Tank, Japanned Brackets, and Flush Pipe with Protector.

M-207.	Complete as described, with Trap and Brass Vent Coupling on Hand Hole,	$30.00
M-208.	Complete as described, with Long Oval Hopper,	25.00
	If with Nickel Plated Ornamental Brass Tank Cover, add	4.00

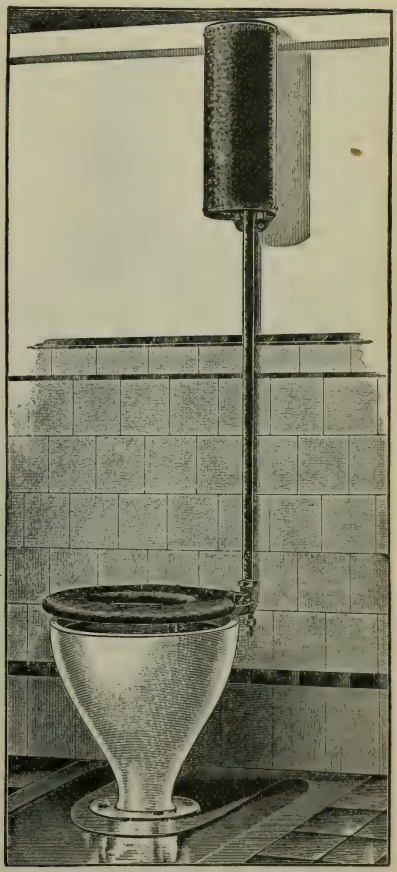
Size of Flush Pipes, 1¼ inches.

CLOW'S AUTOMATIC HOPPER CLOSETS.

(MADDEN'S PATENT.)



M-215.



M-216.

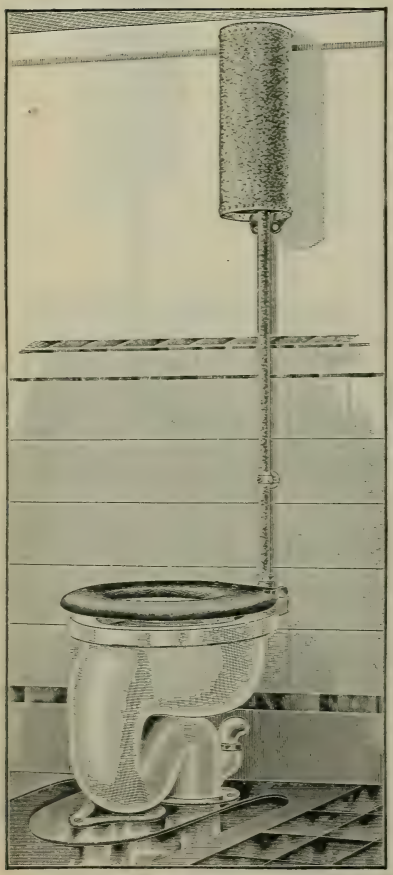
Includes Iron Round Hopper, Enameled Inside and Outside, Automatic Valve and Seat attached to Bowl, Galvanized Iron Closed Tank and Flush Pipe.

M-215. Complete as described, with Trap	$22.00
M-216. Complete as described, with long Hopper	18.00
If with Hand Hole and Vent Coupling, add to list	1.00
If Painted outside, deduct from list	1.00

Size of Flush Pipe, 1¼ inches.

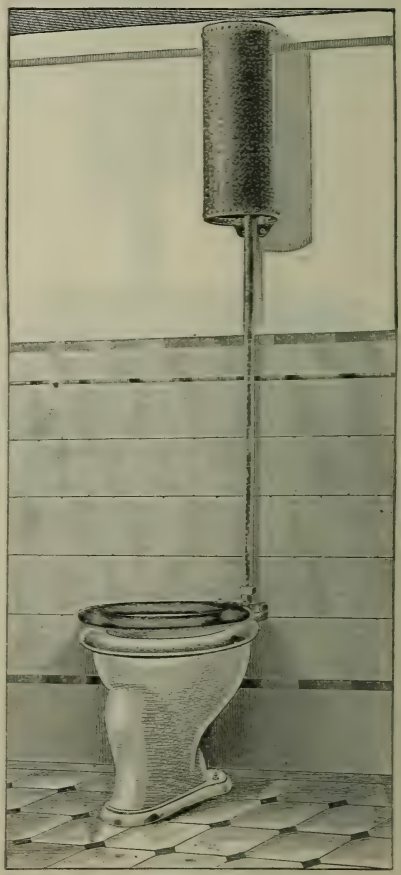
CLOW AUTOMATIC ENAMELED IRON CLOSETS.

MADDEN'S PATENT.



M-223.

Iron Front Washout Closet, Enameled Inside and Outside, Automatic Valve, Seat hinged to Bowl, Galvanized Iron Closed Tank, 1¼-inch Flush Pipe and Tank Supports, Screws and Washers . $30.00



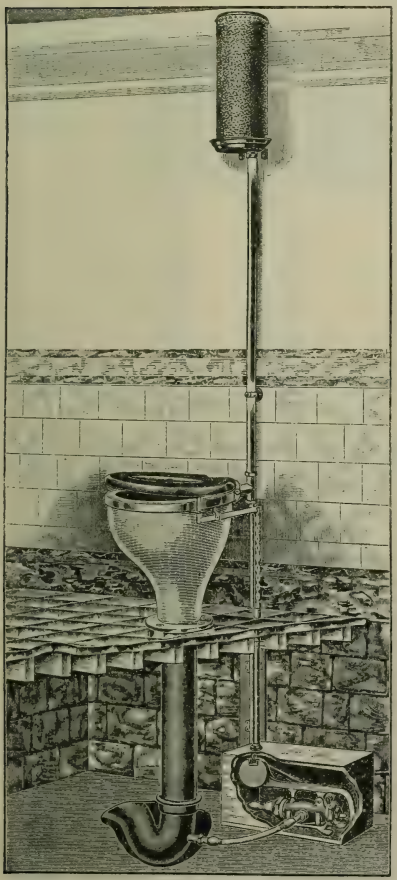
M-224.

Iron Deep Seal Siphon Wash-down Closet, Enameled Inside and Outside, Automatic Valve, Seat hinged to Bowl, Galvanized Iron Closed Tank, 1¼-inch Flush Pipe, Tank Supports, Screws and Washers, $30.00

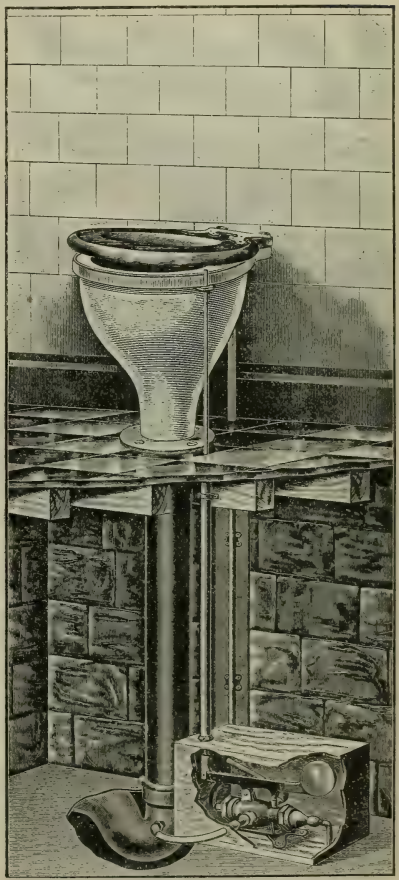
These Closets will work successfully under any pressure over 16 pounds.

CLOW'S AUTOMATIC FROST-PROOF HOPPER CLOSETS.

(MADDEN'S PATENT.)



M-231.



M-232.

M-231 includes Long Oval Iron Flushing Rim Hopper Enameled Inside and Outside, Automatic Valve and Seat attached to Bowl, Galvanized Iron Closed Tank, Brackets, N. P. Flush Pipe with Protector, Frost-proof Valve, Five-foot Waste Pipe and Trap.

M-232 includes Long Oval Iron Flushing Rim Hopper, Enameled Inside and Outside, Seat attached to Bowl, and Frost-proof Valve, Five-foot Waste Pipe and Trap.

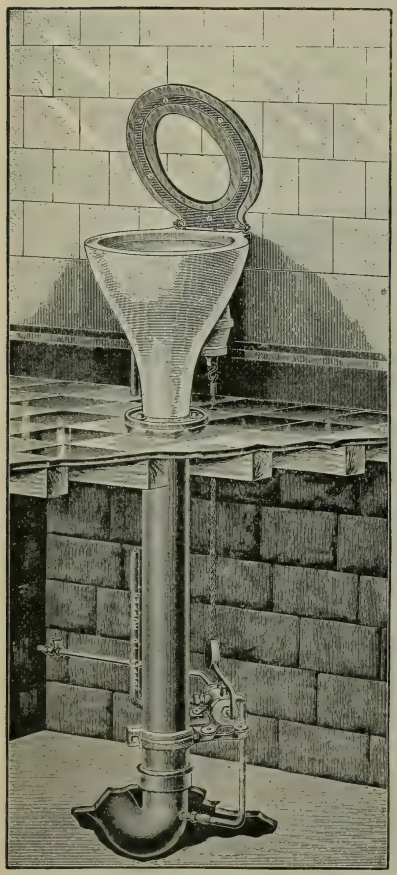
M-231.	Complete as described,	$25.00
M-232.	Complete as described,	20.00

These Closets will work successfully on any pressure over 20 pounds.

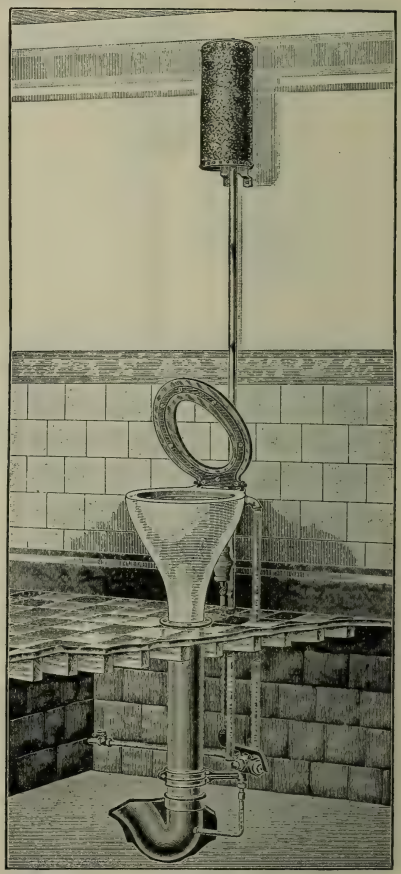
Size of Flush Pipe, 1¼ inches.

CLOW AUTOMATIC FROST-PROOF HOPPER CLOSETS.

(MADDEN'S PATENT.)



M-239.



M-240.

M-239 includes Cast Iron Hopper, Enameled inside and outside, with Self-raising Reinforced Seat attached to Bowl, Frost-proof Valve and Chain, Trap and five feet of Pipe with Flanged and Spigot end.

M-240 includes Cast Iron Hopper, Enameled inside and outside, with Self-raising Reinforced Seat attached to Bowl, Galvanized Tank, Frost-proof Valve, Trap and five feet of Pipe with Flanged and Spigot end.

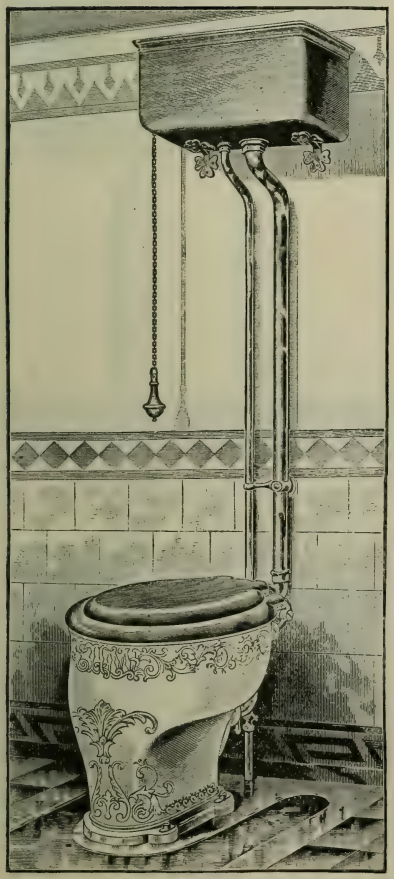
	M-239.	M-240.
Price	$15.00	$19.50
Price, without Trap and Pipe	13.00	17.50

If Hoppers are painted outside, deduct from list, $1.00.

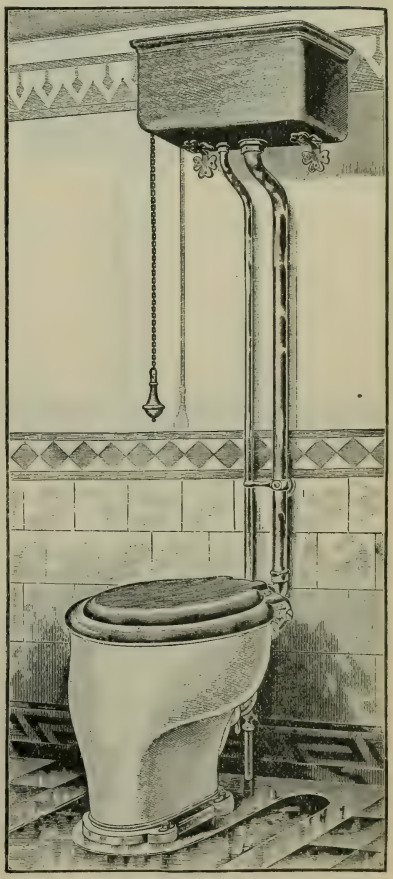
Price does not include Flush or Supply Pipes.

CLOW PEDESTAL WASH-OUT CLOSETS.

MADDEN'S PATENT.



M-247.



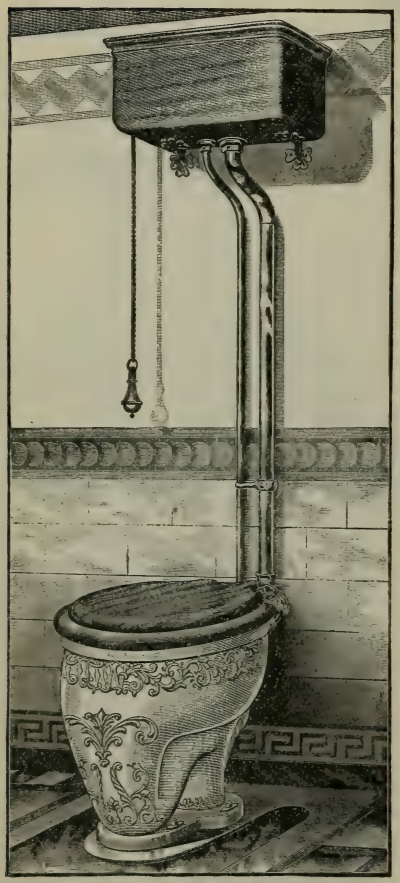
M-248.

Oval Pedestal Wash-out Closet with Seat and Lid hinged to Bowl, No. 5 Round Cornered Bent Wood Oak Siphon Tank, 17x8x10 inches inside, N. P. Tank Supports, 1½-inch Flush Pipe with Protector, ½-inch Supply Pipe, Pull and Chain, Brass Floor Flange, Bolts and Rubber Gasket, Vent to Wall.

M-247.	Embossed Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry,	$36.00
M-248.	Plain Closet, complete as described, with Tank and Seat of Quartered Oak or Cherry,	35.00
If with Sycamore, Cherry, Bird's Eye Maple, Red or White Mahogany Woodwork, add		5.00
If with Marble Floor Slab, 26x26 inches, 1¼ inches thick, as shown, add		8.00
If without Supply Pipe, deduct		2.75
If without Supply and Flush Pipe, deduct		5.50

CLOW WASHOUT CLOSETS, FRONT OUTLET.

MADDEN'S PATENT.



M-255.



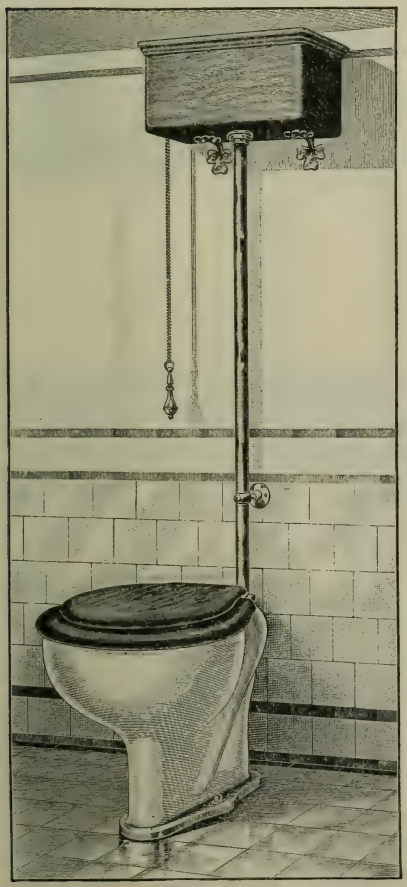
M-256.

Front Outlet Washout Closet with Seat and Lid hinged to Bowl, No. 5 Round Cornered Siphon Tank, 17 x 8 x 10 inches inside, with Nickel Plated Brass Supports, 1⅛-inch Flush and ⅜-inch Supply Pipes, Pull and Chain, Pipe Holders with Buffer, Brass Floor Flange, Bolts and Rubber Gasket.

M-255.	Embossed Closet, complete as described,	$35.00
M-256.	Plain Closet, complete as described,	34.00
	If without Supply Pipe, deduct	2.75
	If without Supply and Flush Pipe, deduct	6.25

Oak Tanks and Seats carried in stock. Quartered Oak, Sycamore or Ash furnished to order without extra cost.
White or Bird's-eye Maple, Cherry, Walnut, Red or White Mahogany, extra, $4.00.
Italian Marble Floor Slab, 26 x 26 inches, 1¼ inches thick, countersunk to fit closet, as shown, add $8.00.

OVAL SIPHON JET.

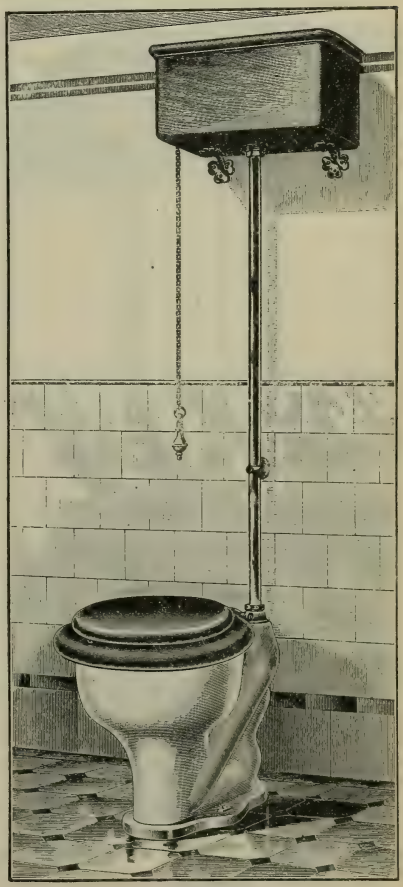


M-260.

Clow Oval Siphon Jet Closet with Seat and Lid hinged to Bowl, Oak Bent Wood No. 4 Tank, 18x10x10 inches inside, N. P. Tank Supports, 1½-inch N. P. Flush Pipe with Protector, Wood Pull and Chain, $27.00

CLOW
SPECIAL

"CIRCLE" SIPHON JET.

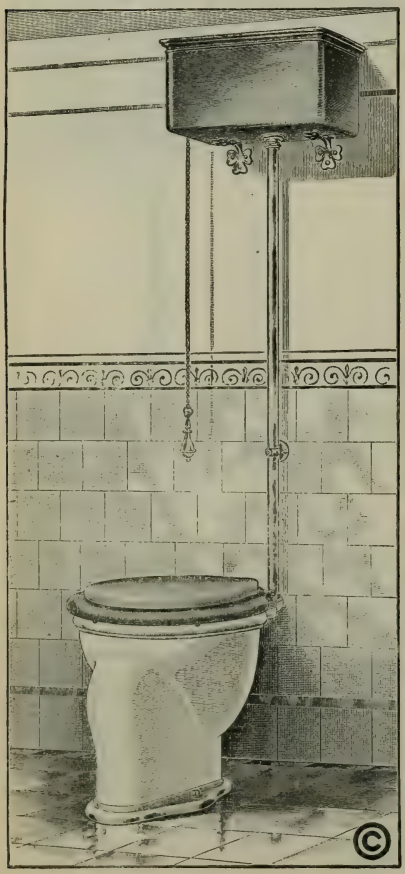


M-261.

"Circle" Siphon Jet Closet with Seat and Lid hinged to Bowl, Oak Bent Wood No. 5 Tank, 17x8x10 inches inside, N. P. Tank Supports, 1½-inch N. P. Flush Pipe with Protector, Wood Pull and Chain, . $26.00

If with Brass Floor Flange, Bolts and Rubber Gasket, add 1.25
If with N. P. Supply Pipe and Stop Cock, ⅜-inch, I. P. Size, add 4.00

TWIN-JET SIPHON WASH-DOWN.



M-272.

Twin-Jet Wash-down Oval Closet, Double Concealed Jet, Seat and Lid hinged to Bowl, No. 5 Bent Wood Oak Tank, 17x8x10 inches inside, N. P. Tank Supports, 1⅛-inch Flush Pipe with Protector, Wood Pull and Chain, ... $24.00

If with Brass Floor Flange, Bolts and Rubber Gasket, add 1.25

If with N. P. Supply Pipe and Stop Cock, ⅜-inch I. P. Size, add 4.00

CLOW © SPECIAL

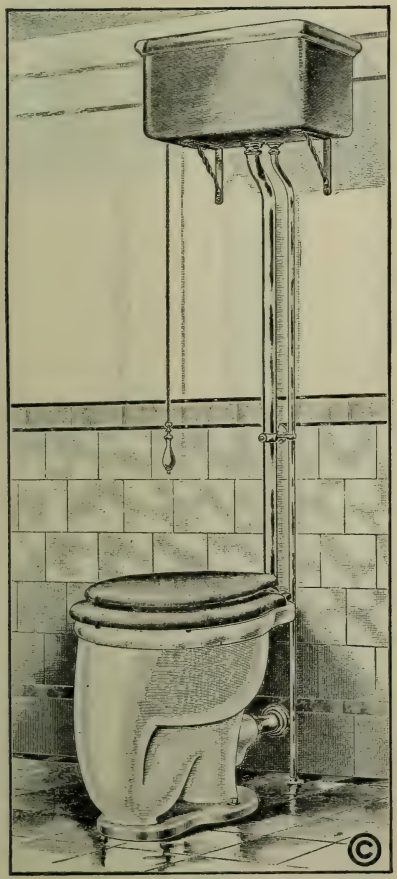
DOLPHIN WASH-DOWN SIPHON.



M-273.

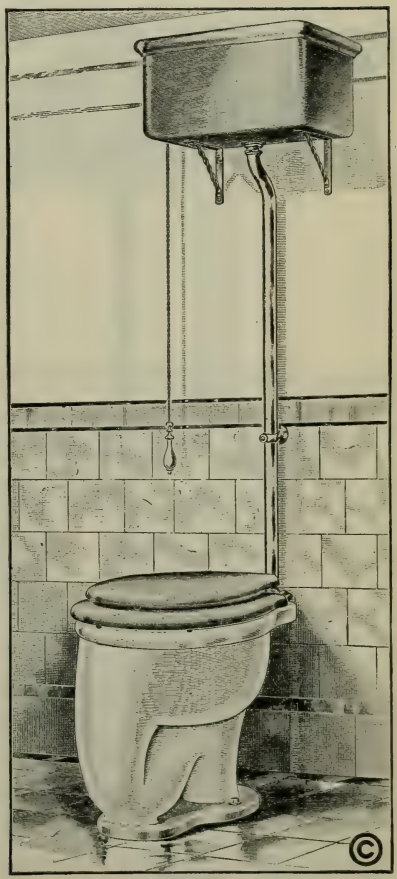
Dolphin Wash-down Siphon Closet with Seat and Lid hinged to Bowl, No. 5 Oak Bent Wood Tank, 17x8x10 inches inside, N. P. Tank Supports, 1⅛-inch N. P. Flush Pipe with Protector, Wood Pull and Chain, . $22.00

"CIRCLE" © WASHOUT.



M-279.

The "CIRCLE" Front Outlet Washout Closet, Oak Seat and Lid hinged to Bowl, No. 5 Bent Wood Oak Tank, 17x8x10 inches inside, N. P. Tank Brackets, 1⅝-inch Flush Pipe with Protector, Slip Joint, ⅝-inch Supply Pipe, I. P. Size, 2-inch Vent and Flange, Wood Pull and Chain, ... $24.00

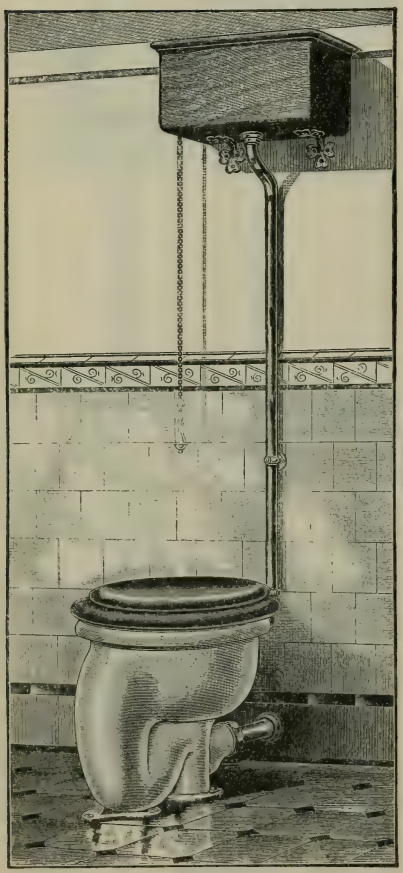


M-280.

The "CIRCLE" Front Outlet Washout Closet, Oak Seat and Lid hinged to Bowl, No. 5 Bent Wood Oak Tank, 17x8x10 inches inside, N. P. Tank Brackets, 1⅝-inch N. P. Flush Pipe with Protector, Slip Joint, Wood Pull and Chain, ... $20.00

If without Supply Pipe, deduct 2.75
If without Flush Pipe and Slip Joint, deduct 2.50
If with Floor Flange, Bolts and Rubber Gasket, add 1.25
If without 2-inch Vent and Flange, deduct 75

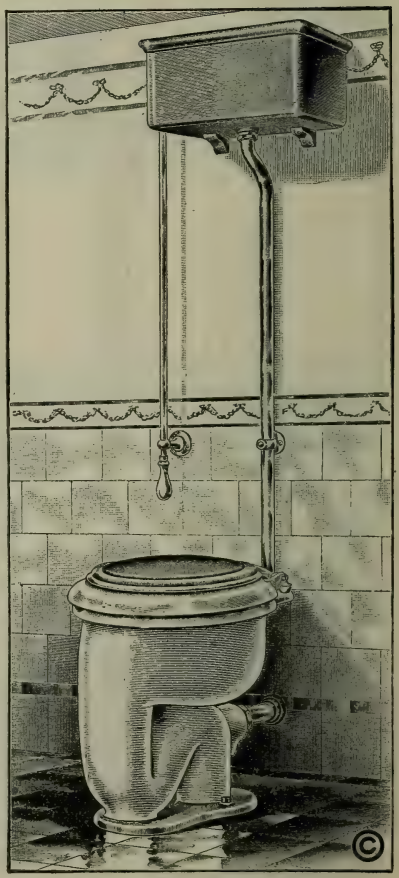
CLOW ENAMELED IRON WASHOUT CLOSETS.



M-286.

Iron Washout Closet, Enameled Inside and Outside, Oak Seat and Lid hinged to Bowl, Bent Wood No. 5 Oak Tank, 17 x 8 x 10 inches inside, N. P. Tank Supports, 1⅜-inch N. P. Flush Pipe with Protector, Slip Joint, Screws and Washers, - - - - - $25.00

CLOW © SPECIAL

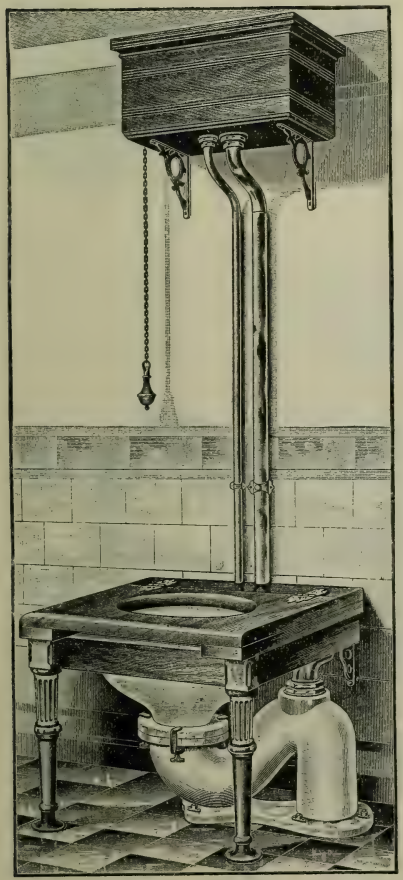


M-288.

Iron Washout Closet, Enameled Inside and Outside, Enameled Hygienic Steel Seat and Lid hinged to Bowl, Enameled Iron Tank, 18 x 10 x 10 inches inside, Enameled Iron Tank Supports, 1⅜-inch N. P. Flush Pipe with Protector, Slip Joint, Wall Guide, N. P. Pull, Rod and Protecting Tube, Screws and Washers, $28.00

If with N. P. Supply Pipe, ⅜-inch I. P. Size, add - - - - - - - - - - - - - - - 2.75
If without N. P. Flush Pipe and Slip Joint, deduct - - - - - - - - - - - - - - 2.50

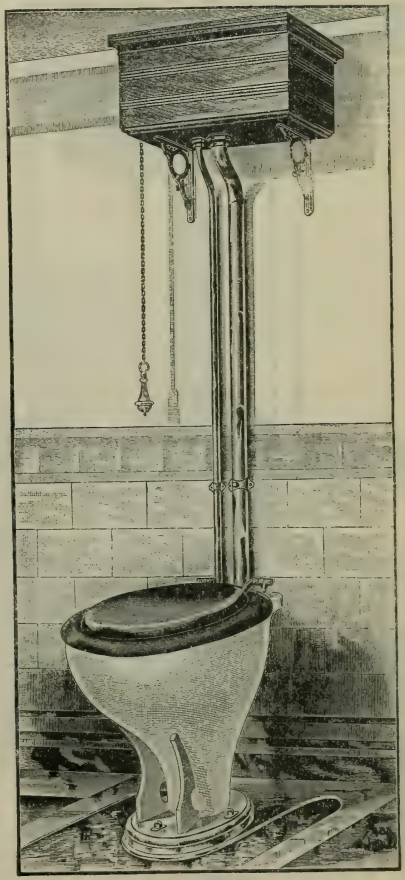
CLOW HOPPER CLOSETS.



M-295.

Earthen Short Flushing Rim Square Hopper and Trap, Single Discharge Siphon Tank, 17x8x10 inches inside, Seat and Painted Legs, N. P. Iron Tank Brackets, 1⅜-inch Flush Pipe, ⅜-inch Supply Pipe, I. P. Size, Pull and Chain, Pipe Holder with Protector and Bolts, ... $22 00

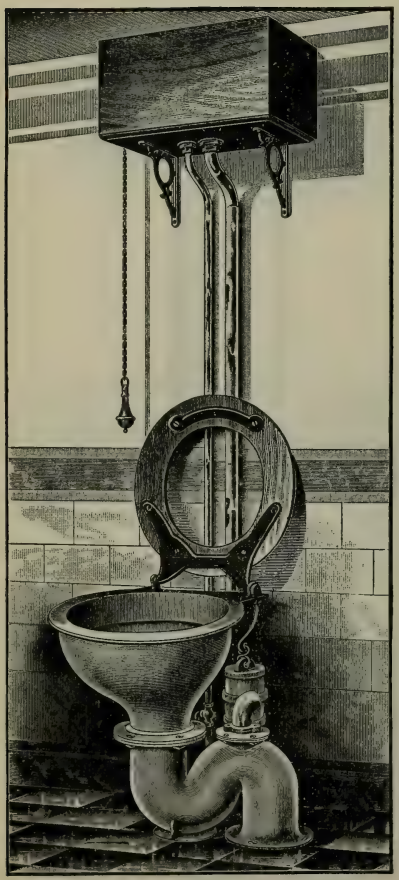
If without N. P. Supply Pipe, deduct 2.75
If without N. P. Flush Pipe, deduct 2.00
If with Seat Cover for M-295, add 1 00



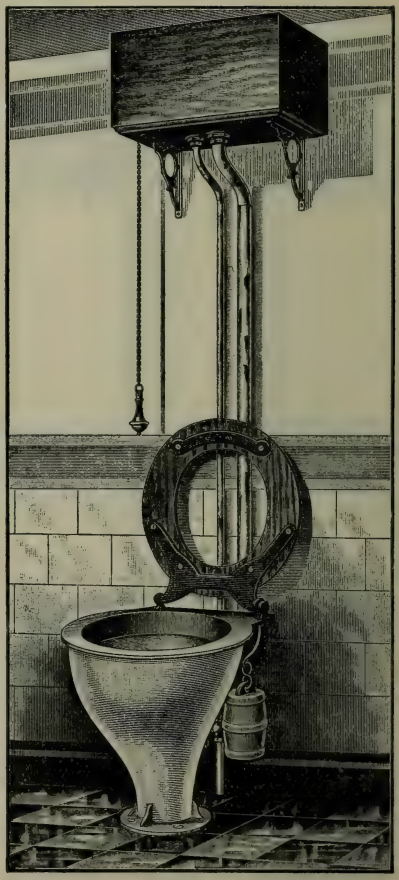
M-302.

Tall Oval Flushing Rim Hopper, Single Discharge Siphon Tank, 17x8x10 inches inside, Seat and Cover, N. P. Iron Tank and Seat Brackets, 1⅜-inch Flush Pipe, ⅜-inch Supply Pipe, I. P. Size, Pull and Chain, Pipe Holder with Protector and Bolts, . . . $18.00

CLOW'S HOPPER CLOSETS.



M-310.



M-311.

Includes Flushing Rim Hopper enameled inside and outside, Seat with weight, Plain Single Discharge Siphon Tank, Nickel Plated Iron Tank Brackets, Flush and Supply Pipes, Rubber Connections to Bowl, Pull and Chain, and Pipe Holders with Buffer.

M-310. Complete with Short Oval Hopper and Trap,	$21.00
M-311. Complete with Tall Oval Hopper,	18.00
If without Nickel Plated Supply Pipe, deduct	2.75
If without Nickel Plated Flush Pipe, deduct	2.00

Size of Flush Pipe, 1¼ inches.

OCEANIC SIPHON JET AUTOMETER CLOSET.

MADDEN'S PATENT.



M-725.

Adamantose Bowl, with concealed Jet Arm and 3½-inch Siphon Limb, 1½-inch reinforced Oak Seat and Ornamental Box Hinge, Autometer, Floor Flange, Bolts and Rubber Gasket.

Price, as described, ... $64.00

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each Closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either Tank or direct supply and may be installed singly or in batteries. Any number of Closets may be supplied from one Tank.

The Autometer must be connected to a main supply pipe not less than 1¼ inches in diameter, the connection to be in accordance with the number of Closets required. When the Closet is to be used with Tank pressure, place the Tank at least 6 feet above the Closet and run a 2-inch Pipe from Tank to Closet and connect Autometer up with 1½-inch Pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1½-inch Pipe, branching to each Closet with 1½-inch connection.

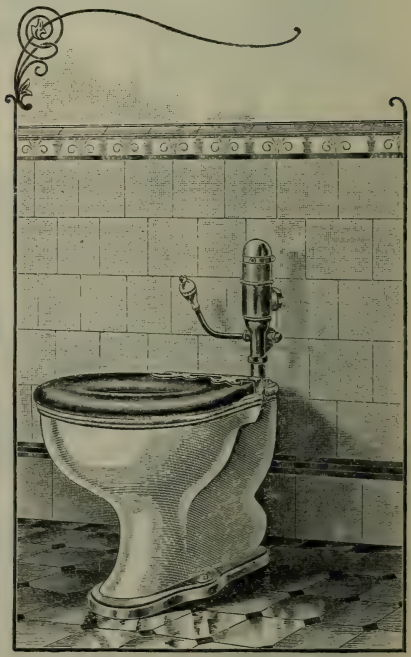
CLOW SIPHON JET AUTOMETER CLOSETS.

MADDEN'S PATENT.



M-730.





M-732.

Adamantose Oval Siphon Jet Bowl with concealed Jet Pipe, Seat and Lid hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-729 Embossed, complete as described, . . $51.00
M-730 Plain, complete as described and shown, 50.00

Adamantose Oval Siphon Jet Bowl with concealed Jet Pipe, 1¼-inch reinforced Seat hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-731 Embossed, complete as described, . . $51.00
M-732 Plain, complete as described and shown, 50.00

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either tank or direct supply and may be installed either singly or in batteries. Any number of closets may be supplied from one tank.

The Autometer must be connected to a main supply pipe not less than 1½ inches in diameter, the connection to be in accordance with the number of closets required. When the closet is to be used with tank pressure, place the tank at least 6 feet above the closet and run a 2-inch pipe from tank to closet and connect Autometer up with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1¼-inch pipe, branching to each closet with 1¼-inch connection.

BUENA SIPHON JET AUTOMETER CLOSET.

MADDEN'S PATENT.



M-735.

Buena Siphon Jet Closet with Adamantose Oval Bowl, Seat and Lid hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-734 Embossed, complete, as described, . $42.00
M-735 Plain, complete as described and shown, 41.00



M-737.

Buena Siphon Jet Closet with Adamantose Oval Bowl, 1¼-inch reinforced Oak Seat hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

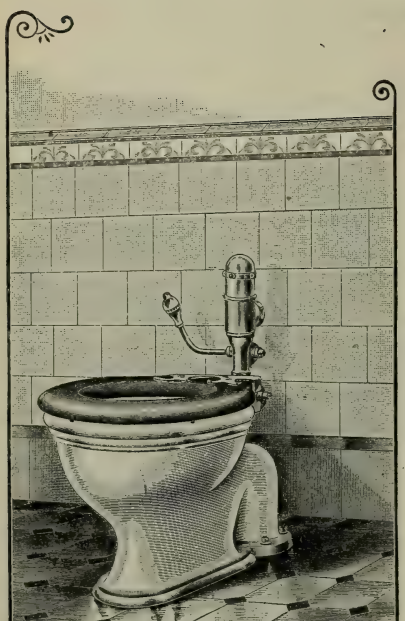
M-736 Embossed, complete as described, . $42.00
M-737 Plain, complete as described and shown, 41.00

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each Closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either Tank or direct supply and may be installed either singly or in batteries. Any number of Closets may be supplied from one Tank.

The Autometer must be connected to a main supply pipe not less than 1½ inches in diameter, the connection to be in accordance with the number of Closets required. When the Closet is to be used with Tank pressure, place the Tank at least 6 feet above the Closet and run a 2-inch pipe from Tank to Closet, and connect Autometer with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with a 1¼-inch pipe, branching to each Closet with 1¼-inch connection.

CLOW WASH-DOWN AUTOMETER CLOSETS.

MADDEN'S PATENT.



M-740.





M-741.

Adamantose Wash-down Bowl, Seat hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-740 Complete as described, ... $47.00
M-741 Complete as described, ... 48.00

For pressures under 10 pounds, or where Tank is from 2 to 20 feet above Closet, the No. 1 Autometer should be specified; for pressures over 10 pounds, or where Tank is more than 20 feet above Closet, specify Autometer No. 2. Supply should be 1½ inches.

These Closets, owing to their simple construction and durability, are especially adapted for use in fire-proof and public buildings. Adamantose, as a material, insures great strength, which is desirable where Closets are subjected to hard usage and where earthenware fixtures are required.

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each Closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either Tank or direct supply and may be installed either singly or in batteries. Any number of Closets may be supplied from one tank.

The Autometer must be connected to a main supply pipe not less than 1¼ inches in diameter, the connection to be in accordance with the number of Closets required. When the Closet is to be used with Tank pressure, place the Tank at least 6 feet above the Closet and run a 2-inch pipe from Tank to Closet and connect Autometer up with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with a 1¼-inch pipe, branching to each Closet with 1¼-inch connection.

CLOW ADAMANTOSE AUTOMETER CLOSETS.

MADDEN'S PATENT.

HOPPER.

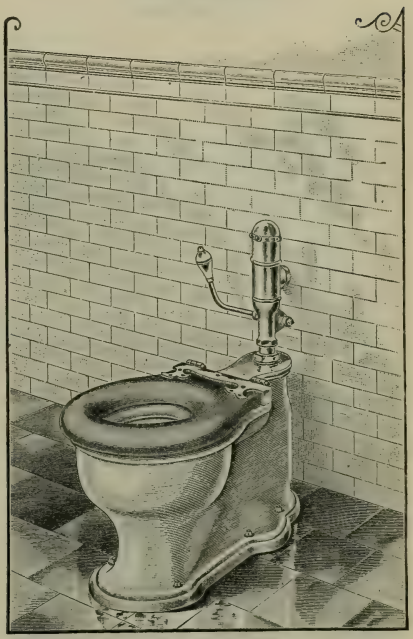


M-745.

Adamantose Combined Hopper Closet, Seat hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

Complete as described $44.00

KOREA SIPHON JET.



*M-748.

Korea Adamantose Closet with concealed Jet Arm and 3¼-inch Siphon Limb, 1½-inch reinforced Oak Seat hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

Complete as described $59.00

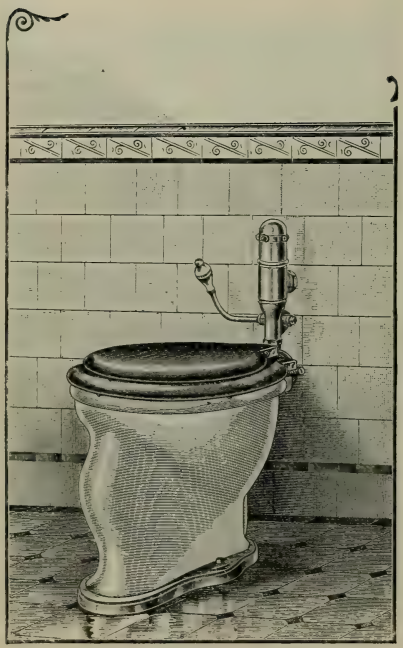
*M-748. Korea Closet is of our Adamantose, vitreous throughout, of unusually substantial construction, but of juvenile height, being intended for use in Primary Schools and Children's Institutions. It is practically indestructible, perfect in action, and one of the finest combinations we have ever produced.

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either tank or direct supply and may be installed either singly or in batteries. Any number of closets may be supplied from one tank. The Autometer must be connected to a main supply pipe not less than 1¼ inches in diameter, the connection to be in accordance with the number of closets required. When the closet is to be used with tank pressure, place the tank at least 6 feet above the closet and run a 2-inch pipe from tank to closet and connect Autometer up with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1¼-inch pipe, branching to each closet with 1¼-inch connection.

CLOW WASHDOWN AUTOMETER CLOSETS.

MADDEN'S PATENT.

JET ACTION.



M-750.

Adamantose Washdown Bowl with Jet Action, Seat and Lid hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-749 Embossed, complete as described, . $39.00
M-750 Plain, complete as described and shown, 38.00

SIPHON WASHDOWN.



M-756.

Oval Deep Seal Siphon Washdown Bowl, Seat and Lid hinged to Bowl, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-755 Embossed, complete as described, . $33.00
M-756 Plain, complete as described and shown, 32.00

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each Closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either Tank or direct supply and may be installed either singly or in batteries. Any number of Closets may be supplied from one tank.

The Autometer must be connected to a main supply pipe not less than 1¼ inches in diameter, the connection to be in accordance with the number of Closets required. When the Closet is to be used with Tank pressure, place the Tank at least 6 feet above the Closet and run a 2-inch pipe from Tank to Closet and connect Autometer up with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1¼-inch pipe, branching to each Closet with 1¼-inch connection.

CLOW ENAMELED IRON AUTOMETER CLOSETS.

MADDEN'S PATENT.

SIPHON JET.

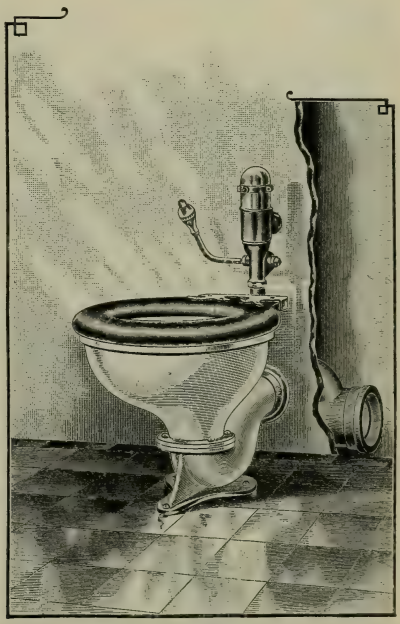


M-760.

Iron Siphon Jet Closet, Enameled inside and outside, reinforced Seat hinged to Bowl, Autometer, Bolts and Washers.

M-760 Complete as described, - - - $40.00

WASH-DOWN.



*M-765.

Iron Wash-down Closet, Enameled inside and outside, reinforced Seat attached to Bowl, Autometer, Iron Drainage connection, Bolts and Nuts.

M-765 Complete as described, - - - $40.00

*When the Soil Pipe is to be run in front of wall or back of partition, above the floor, as is often necessary in fire-proof and other buildings, the inlets of Drainage Connections, being cast on different angles and made adjustable, provide the necessary pitch for any number of Closets without grading the floor. This Closet, with No. 7 or No. 7½ Autometer, arranged as in M-765, is especially desirable for Jails.

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each Closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either tank or direct supply and may be installed singly or in batteries. Any number of Closets may be supplied from one tank.

The Autometer must be connected to a main supply pipe not less than 1¼ inches in diameter, the connection to be in accordance with the number of Closets required. When the Closet is to be used with Tank pressure, place the Tank at least 6 feet above the Closet and run a 2-inch pipe from Tank to Closet and connect Autometer up with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1¼-inch pipe, branching to each Closet with 1¼-inch connection.

CLOW ADAMANTOSE AUTOMETER CLOSETS.

FOR HOSPITALS, ASYLUMS BARRACKS, RAILWAY STATIONS, ETC.

WASH-DOWN.

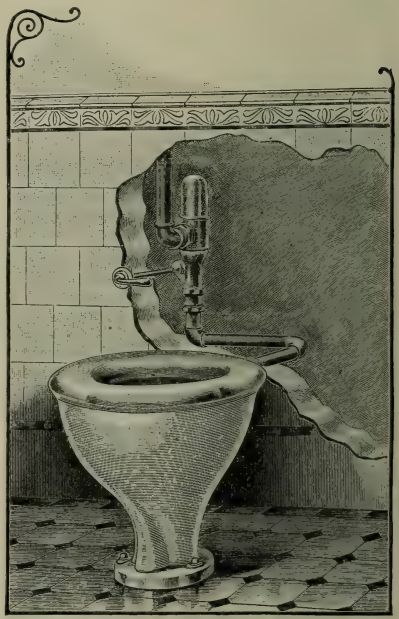


M-770.

Adamantose Wash-down Bowl and Seat in one piece, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-770 Complete as described, - - $46.00

HOPPER.



M-775.

Adamantose Tall Oval Flushing Rim Hopper Closet and Seat in one piece, Autometer, Brass Floor Flange, Bolts and Rubber Gasket.

M-775 Complete as described, - - $38.00

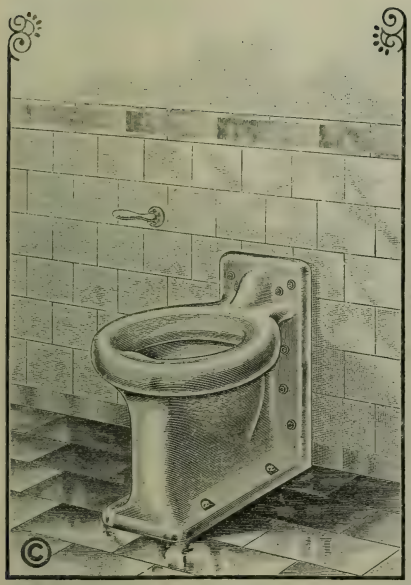
These fixtures are adapted for use in Hospitals, Lunatic Asylums, Barracks and other public buildings. The absence of woodwork insures cleanliness and prevents contagion. Where floors are of cement or tile and provided with drain, these Closets can be thoroughly cleansed by using a hose.

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either tank or direct supply and may be installed either singly or in batteries. Any number of closets may be supplied from one tank.

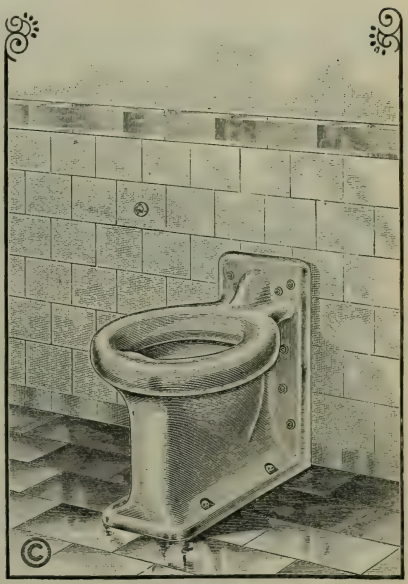
The Autometer must be connected to a main supply pipe not less than 1½ inches in diameter, the connection to be in accordance with the number of closets required. When the closet is to be used with tank pressure, place the tank at least 6 feet above the closet and run a 2-inch pipe from tank to closet and connect Autometer up with a 1½-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1½-inch pipe, branching to each closet with 1½-inch connection.

CLOW PRISON CLOSETS.

MADDEN'S PATENT.



M-780



M-785.

Adamantose Prison Closet with Angle Flanges and Seat in one piece, Wall Outlet, Brass Flanges, Bolts and Gaskets, Autometer, Thimble through wall and Lever, - - - - - - - $46.25

Adamantose Prison Closet with Angle Flanges and Seat in one piece, Wall Outlet, Brass Flanges, Bolts and Gaskets, Autometer, Thimble through wall and Push Button, - - - - - - - $46.25

No. 3 Iron Tank, enameled inside and finished outside with Clow Non-condensing Tank Enamel, and Patent Flushing Device, furnished at same price if preferred.

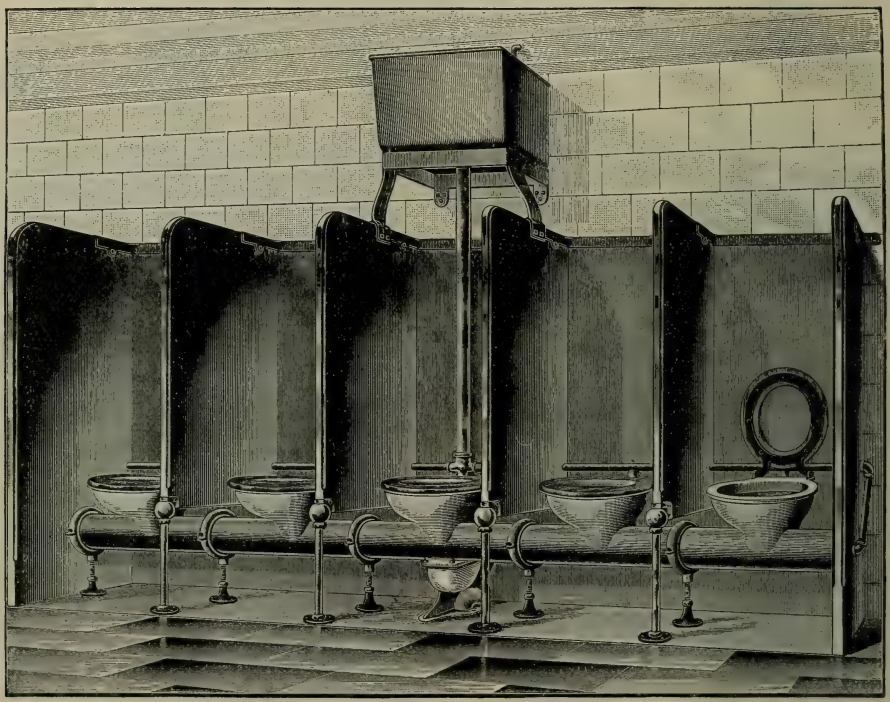
The above Prison Closets are especially designed for use in steel cells. The bowl can be made fast to both floor and wall by bolts or rivets secured in such a manner that they cannot be removed from inside of cell. These Closets are absolutely hygienic and reliable in operation.

The Clow Autometer will operate perfectly under all conditions and, regardless of the number in use at the same time on the same supply system, each Closet will be thoroughly flushed. The Autometer is guaranteed to operate under any pressure over ten pounds. The above fixture is for either tank or direct supply and may be installed either singly or in batteries. Any number of closets may be supplied from one tank.

The Autometer must be connected to a main supply pipe not less than 1½ inches in diameter, the connection to be in accordance with the number of closets required. When the closet is to be used with tank pressure, place the tank at least 6 feet above the closet and run a 2-inch pipe from tank to closet and connect Autometer up with a 1¼-inch pipe. In connecting for several floors, use the foregoing connection for the top and continue down with 1¼-inch pipe, branching to each closet with 1¼-inch connection.

CLOW SIPHON JET RANGE CLOSETS.

MADDEN'S PATENT.



M-840.

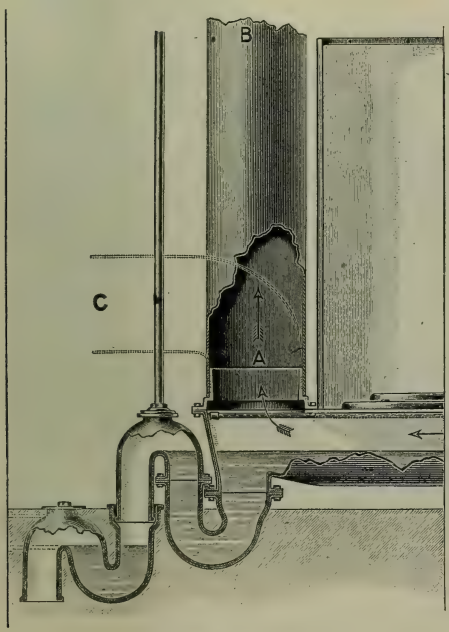
Clow Five-Section Siphon-Jet Range Closet, Adjustable Standards, Heavy Oak reinforced Seats attached to Bowls, Automatic Siphon Iron Tank with Iron Brackets, Brass Flush Pipes, Slate Partitions and Backs, and Brass Legs.

DIMENSIONS—Height of Closet, 18½ in.; height to top of partition, 5 ft.; depth, 27 in.; distance, center to center, 27 in.; outlet, 5 in.

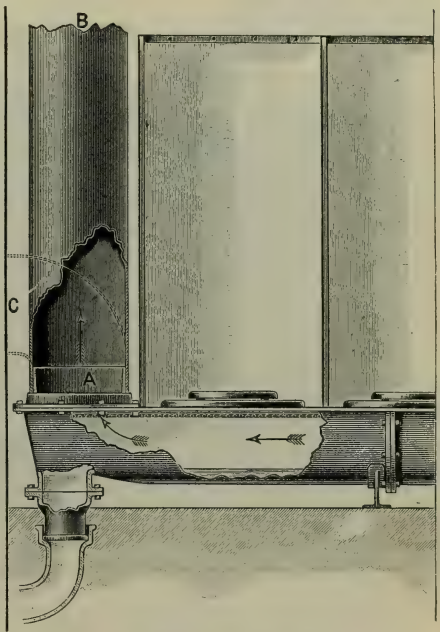
Number of Seats.	Without Partitions.		With Slate Partitions and Back, complete as shown.	
	Enameled Inside and Painted Outside.	Enameled Inside and Outside.	Enameled Inside and Painted Outside.	Enameled Inside and Outside.
3	$108.00	$120.00	$194.00	$206.00
4	138.00	154.00	249.00	265.00
5	168.00	188.00	302.50	322.50
6	198.00	222.00	359.50	383.50
7	228.00	256.00	414.00	442.00

These Closets can be set up back to back to form a Double Range when desired. Prices on application.

CLOW VENTILATING EXTENSIONS FOR RANGE CLOSETS.



M-850. SIPHON.



M-852. WASHOUT.

The Clow Ventilating Collar and Extension can be applied to any of our Siphon and Washout Ranges. It adds 15 inches to the regular length given for Range Closets, as shown on the following pages.

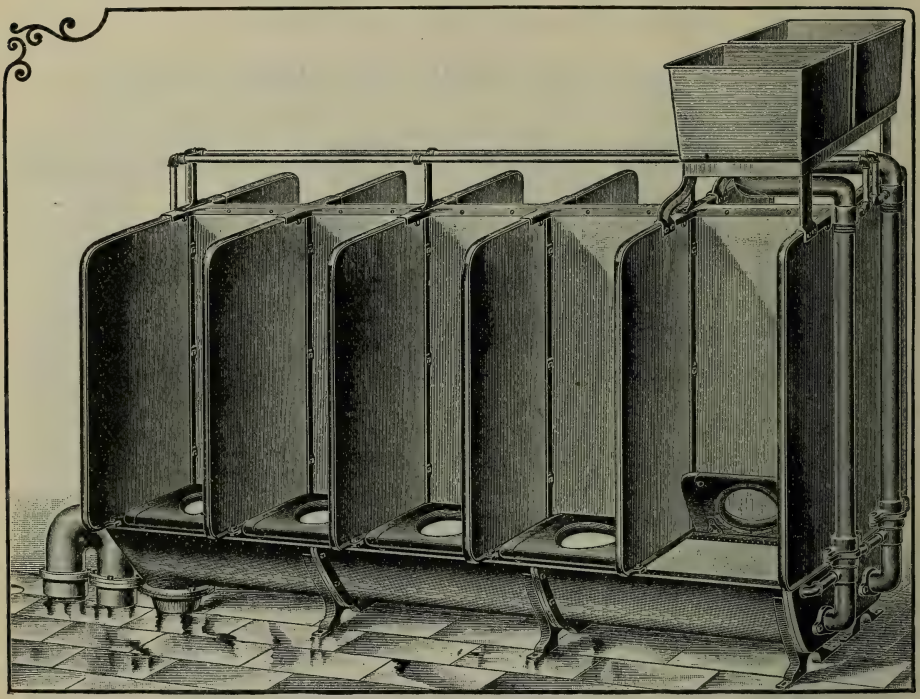
	Painted.	Enameled.
Ventilating Extension	7.00	12.00

Above price does not include the Ventilating Pipe, which can be run either as a straight pipe, as in A B, or with a short turn, as in A C.

LOCAL VENTILATION is one of the most important of recent improvements in sanitation. It not only ventilates the fixtures but ventilates the room in which they are installed.

The Clow Ventilating Extension should be imperative in all Range Closet specifications, particularly for School Buildings in which Local Ventilation is called for in connection with Closet Fixtures.

CLOW DOUBLE AUTOMATIC SIPHON RANGE CLOSETS.



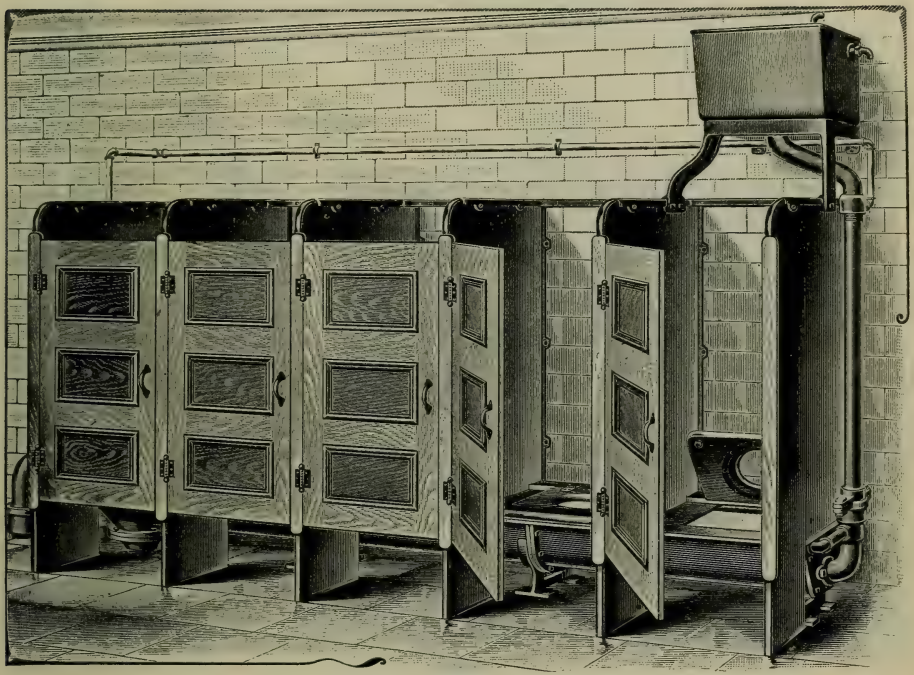
M-854.

Clow's Automatic Siphon Double Range Closet, Perforated Wash-Down Pipes at Front and Back, Galvanized Iron Flush Pipes, Hardwood Top and Seats, heavy Brass Hinges, Painted Cast-Iron Partitions and Backs, Painted Automatic Flushing Iron Tanks on Iron Supports.

Length of Range.	Number of Seats.	Size of Seats.	Number of Partitions.	Prices, Complete as described. Enameled.	Painted.
6 feet 7 inches.	6	24 inches.	8	$266.50	$213.50
8 " 7 "	8	24 "	10	324.00	254.00
10 " 7 "	10	24 "	12	381.50	294.50
12 " 7 "	12	24 "	14	439.00	335.00
14 " 7 "	14	24 "	16	496.50	375.50
16 " 7 "	16	24 "	18	554.00	416.00
18 " 7 "	18	24 "	20	611.50	456.50
20 " 7 "	20	24 "	22	669.00	497.00
7 " 4 "	6	27 "	8	280.50	223.50
9 " 7 "	8	27 "	10	344.00	268.00
11 " 10 "	10	27 "	12	407.50	312.50
14 " 1 "	12	27 "	14	471.00	357.00
16 " 4 "	14	27 "	16	534.50	401.50
18 " 7 "	16	27 "	18	598.00	446.00
20 " 10 "	18	27 "	20	661.50	490.50

If with Galvanized Partitions, add for each Partition $3.00; for Backs, each, $3.50.
If with Ventilating Extension and Collar as shown in M-850, add, Painted $7.00, Enameled $12.00.
If with Galvanized Iron Reinforced Seat Bands, add for each seat, $1.25.
The above price does not include the Trap beneath the floor, or the Air Pipe from cistern to trap.

CLOW AUTOMATIC SIPHON RANGE CLOSETS.



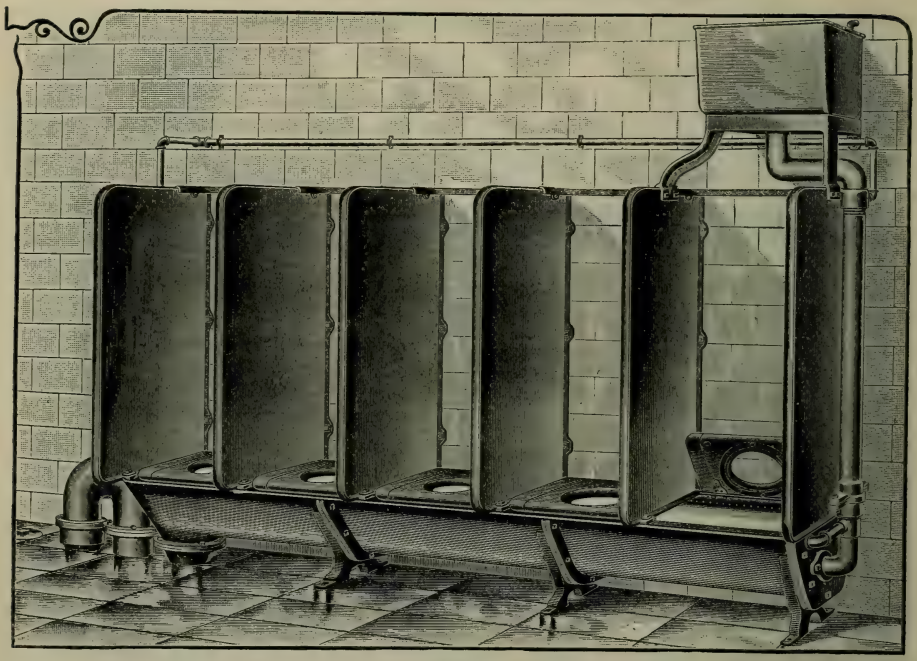
M-855.

Clow Automatic Siphon Range Closet, Perforated Wash-Down Pipes at Front and Back, Galvanized Iron Flush Pipe, Hardwood Top and Seats, Heavy Brass Hinges, Painted Cast Iron Partitions, Oak Paneled Doors, Brass Spring Hinges and Door Pulls and Painted Automatic Flushing Tank on Iron Support.

Length of Range.	Number of Seats.	Size of Seats.	Number of Partitions.	Price, complete as described. Enameled.	Painted.
6 feet 7 inches.	3	24 inches.	4	$203.00	$184.00
8 " 7 "	4	24 "	5	250.00	225.00
10 " 7 "	5	24 "	6	297.00	266.00
12 " 7 "	6	24 "	7	344.00	307.00
14 " 7 "	7	24 "	8	391.00	348.00
16 " 7 "	8	24 "	9	438.00	389.00
18 " 7 "	9	24 "	10	485.00	430.00
20 " 7 "	10	24 "	11	532.00	471.00
7 " 4 "	3	27 "	4	208.50	187.50
9 " 7 "	4	27 "	5	258.00	230.00
11 " 10 "	5	27 "	6	307.50	272.50
14 " 1 "	6	27 "	7	357.00	315.00
16 " 4 "	7	27 "	8	406.50	357.50
18 " 7 "	8	27 "	9	456.00	400.00
20 " 10 "	9	27 "	10	505.50	442.50

If with Galvanized Partitions, add for each Partition $3.50.
If with Ventilating Extension and Collar as shown in M-850, add, Painted $7.00, Enameled $12.00.
If with Galvanized Iron reinforced Seat Bands, add for each Seat $1.25.
The above price does not include the Trap beneath the floor or the Air Pipe from Cistern to Trap.
In ordering specify whether Right or Left Hand Outlet is desired.

CLOW AUTOMATIC SIPHON RANGE CLOSETS.



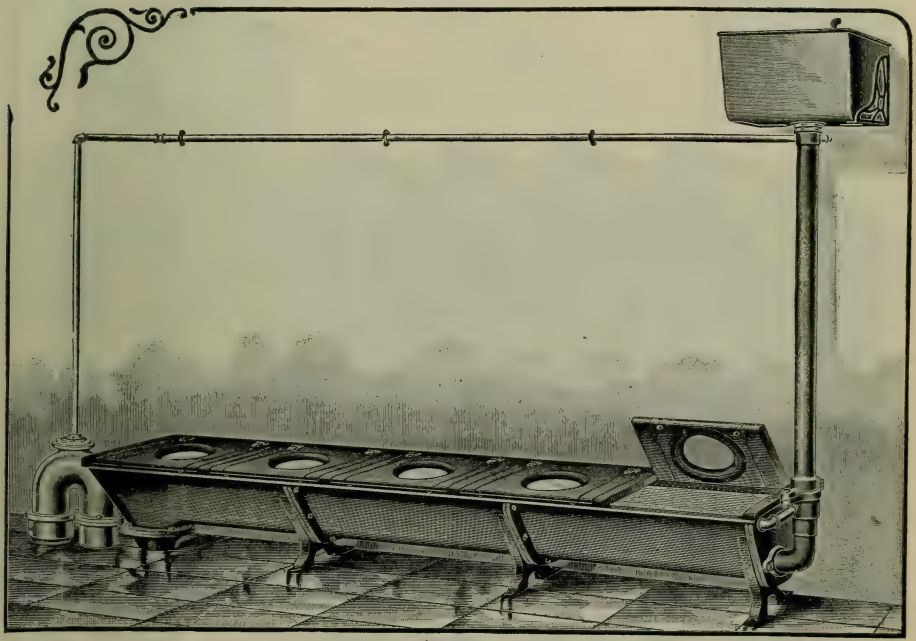
M-856.

Automatic Siphon Range Closet with Perforated Wash-down Pipe on front and back, Galvanized Iron Flush Pipe, Ash Seats, Heavy Brass Hinges, Painted Cast Iron Partitions and Copper Lined Hardwood Automatic Flushing Tank with Painted Iron Brackets.

Length of Range.	Number of Seats.	Size of Seats.	Number of Partitions.	Price complete as described. Enameled	Painted.
6 feet 7 inches.	3	24 inches.	4	$119 00	$100 00
8 " 7 "	4	24 "	5	143 00	118.00
10 " 7 "	5	24 "	6	167 00	136 00
12 " 7 "	6	24 "	7	191 00	154 00
14 " 7 "	7	24 "	8	215 00	172 00
16 " 7 "	8	24 "	9	239 00	190 00
18 " 7 "	9	24 "	10	263 00	208 00
20 " 7 "	10	24 "	11	287 00	226 00
7 " 4 "	3	27 "	4	124.50	103 50
9 " 7 "	4	27 "	5	151 00	123 00
11 " 10 "	5	27 "	6	177 50	142 50
14 " 1 "	6	27 "	7	204 00	162.00
16 " 4 "	7	27 "	8	230 50	181 50
18 " 7 "	8	27 "	9	257 00	201 00
20 " 10 "	9	27 "	10	283 50	220 50

If with Galvanized Partitions, add, for each Partition, $3.00,
If with Ventilating Extension and Collar as shown in M-850, add, Painted $7 00, Enameled, $12 00.
If with Galvanized Iron reinforced Seat Bands, add, for each Seat, $1.25.
The above does not include the Trap beneath the floor or the Air Pipe from cistern to Trap.
In ordering specify whether Right or Left-hand Outlet is desired.

CLOW AUTOMATIC SIPHON RANGE CLOSETS.



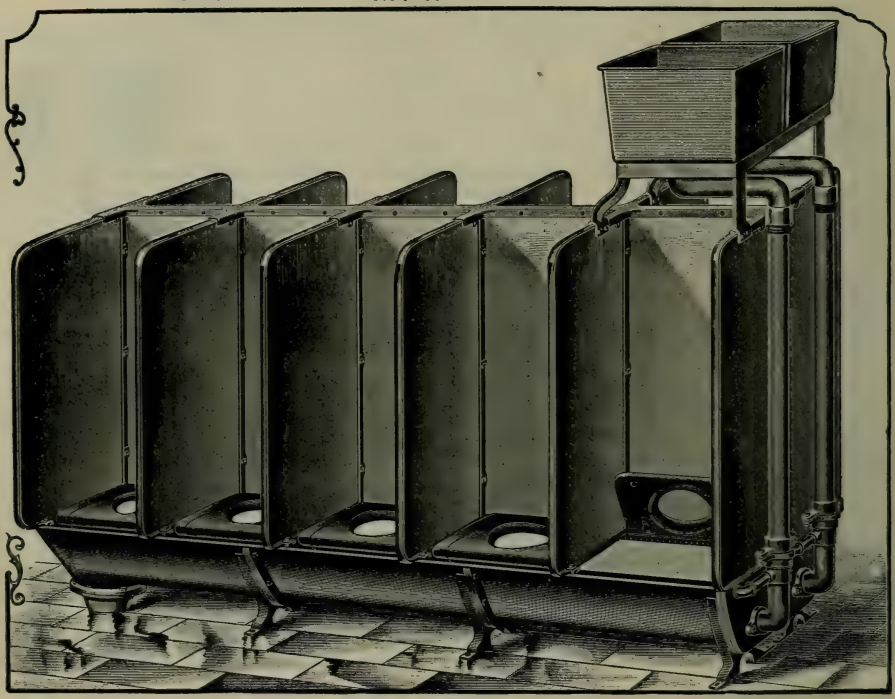
M-857.

Clow Automatic Siphon Range Closet, Perforated Wash-Down Pipes at Front and Back, Galvanized Iron Flush Pipe, Hardwood Top and Seats, Heavy Brass Hinges and Painted Iron Automatic Flushing Tank with Painted Iron Brackets.

Length of Range.	Number of Seats.	Size of Seats.	Prices, complete as described. Enameled.	Painted.	Prices without Seats. Enameled.	Painted.
6 feet 7 inches.	3	24 inches.	$92.00	$73.00	$84.50	$65.50
8 " 7 "	4	24 "	109.00	84.00	99.00	74.00
10 " 7 "	5	24 "	126.00	95.00	113.50	82.50
12 " 7 "	6	24 "	143.00	106.00	128.00	91.00
14 " 7 "	7	24 "	160.00	117.00	142.50	99.50
16 " 7 "	8	24 "	177.00	128.00	157.00	108.00
18 " 7 "	9	24 "	194.00	139.00	171.50	116.50
20 " 7 "	10	24 "	211.00	150.00	186.00	125.00
7 " 4 "	3	27 "	97.50	76.50	90.00	69.00
9 " 7 "	4	27 "	117.00	89.00	107.00	79.00
11 " 10 "	5	27 "	136.50	101.50	124.00	89.00
14 " 1 "	6	27 "	156.00	114.00	141.00	99.00
16 " 4 "	7	27 "	175.50	126.50	158.00	109.00
18 " 7 "	8	27 "	195.00	139.00	175.00	119.00
20 " 10 "	9	27 "	214.50	151.50	192.00	129.00

If with Ventilating Extension and Collar as shown in M-850, add, Painted $7.00, Enameled $12.00.
If with Galvanized Iron Reinforced Seat Bands, add for each Seat $1.25.
The above does not include the Trap beneath the floor or Air Pipe from Cistern to Trap.
In ordering specify whether right or left hand Outlet is desired.

CLOW DOUBLE WASHOUT RANGE CLOSETS.



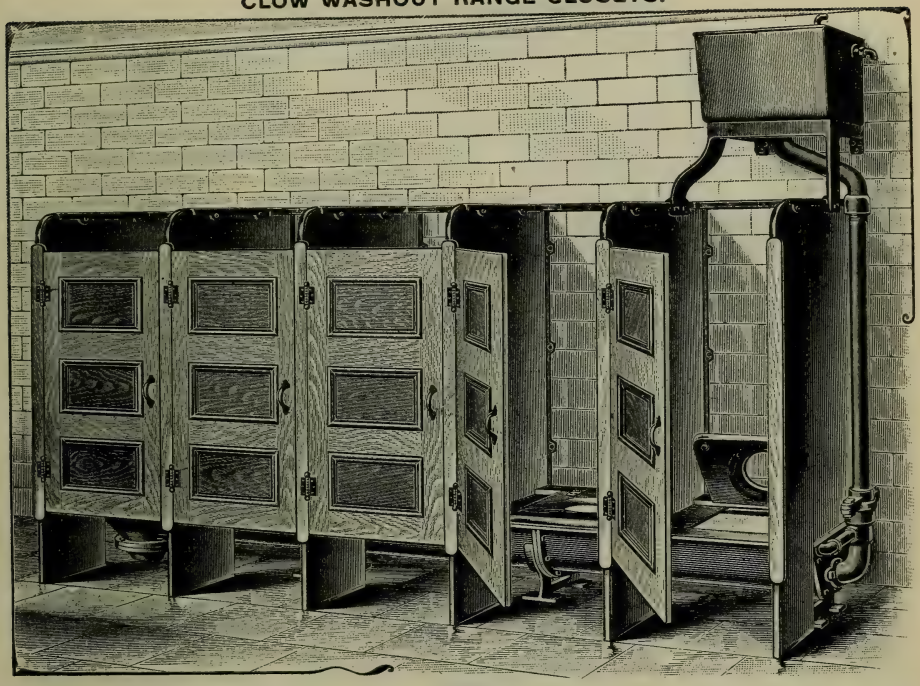
M-858.

Clow Automatic Flushing Washout Double Range Closet, Perforated Wash-Down Pipes at Front and Back, Galvanized Iron Flush Pipes, Hardwood Top and Seats, heavy Brass Hinges, Painted Cast-Iron Partitions and Backs and Painted Iron Automatic Flushing Tanks on Iron Supports.

Length of Range.	Number of Seats.	Size of Seats.	Number of Partitions.	Prices, complete as described. Enameled.	Painted.
4 feet 0 inches.	4	24 inches.	6	$122.00	$102.00
6 " 0 "	6	24 "	8	163.50	133.00
8 " 0 "	8	24 "	10	211.50	170.50
10 " 0 "	10	24 "	12	252.50	201.50
12 " 0 "	12	24 "	14	299.50	237.50
14 " 0 "	14	24 "	16	340.50	268.50
16 " 0 "	16	24 "	18	381.50	299.00
18 " 0 "	18	24 "	20	422.50	330.00
20 " 0 "	20	24 "	22	463.50	359.50
4 " 6 "	4	27 "	6	127.00	105.00
6 " 9 "	6	27 "	8	170.50	137.50
9 " 0 "	8	27 "	10	222.00	176.50
11 " 3 "	10	27 "	12	266.00	209.00
13 " 6 "	12	27 "	14	316.00	247.00
15 " 9 "	14	27 "	16	360.00	279.00
18 " 0 "	16	27 "	18	404.00	311.00
20 " 3 "	18	27 "	20	448.00	342.50

If with Galvanized Partitions, add for each Partition, $3.00; for Backs, each, $3.50.
If with Galvanized Iron reinforced Seat Bands, add for each Seat $1.25.
If with Ventilating Extension and Collar as shown in M-852, add, Painted $7.00, Enameled $12.00.

CLOW WASHOUT RANGE CLOSETS.



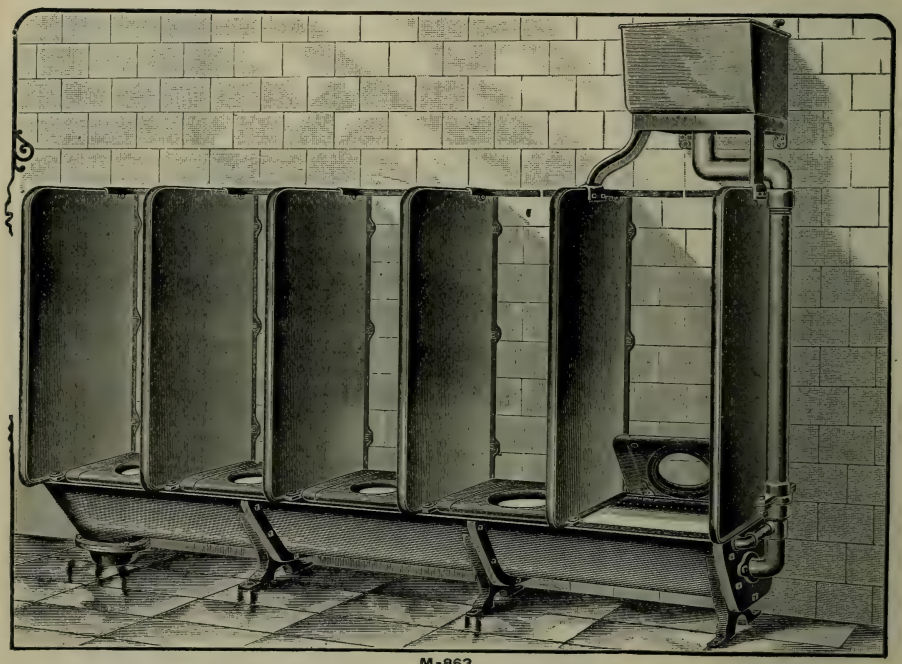
M-861.

Clow Automatic Flushing Washout Range Closet, Perforated Washdown Pipes at front and back, Galvanized Iron Flush Pipe, Hardwood Top and Seats, heavy Brass Hinges, Painted Cast Iron Partitions, Oak Paneled Doors, N. P. Brass Spring Hinges and Door Pulls, Painted Iron Automatic Flushing Tank on Iron Support.

Length of Range.	Number of Seats.	Size of Seats.	Number of Partitions.	Price, complete as described. Enameled.	Painted.
4 feet 0 inches.	2	24 inches.	3	$129.00	$118.00
6 " 0 "	3	24 "	4	175.00	158.00
8 " 0 "	4	24 "	5	224.00	202.00
10 " 0 "	5	24 "	6	270.00	241.00
12 " 0 "	6	24 "	7	319.00	284.00
14 " 0 "	7	24 "	8	364.00	324.00
16 " 0 "	8	24 "	9	410.00	364.00
18 " 0 "	9	24 "	10	455.00	403.00
20 " 0 "	10	24 "	11	501.00	443.00
4 " 6 "	2	27 "	3	132.00	120.00
6 " 9 "	3	27 "	4	179.00	160.00
9 " 0 "	4	27 "	5	230.00	205.00
11 " 3 "	5	27 "	6	277.00	246.00
13 " 6 "	6	27 "	7	328.00	289.00
15 " 9 "	7	27 "	8	373.00	330.00
18 " 0 "	8	27 "	9	422.00	370.00
20 " 3 "	9	27 "	10	469.00	410.00

If with Galvanized Partitions, add for each Partition $3.50. If with Galvanized Iron reinforced Seat Bands, add for each Seat $1.25.
If with Ventilating Extension and Collar as shown in M-852, add, Painted $7.00, Enameled $12.00.
In ordering specify whether Right or Left hand Outlet is desired.

CLOW WASHOUT RANGE CLOSETS.



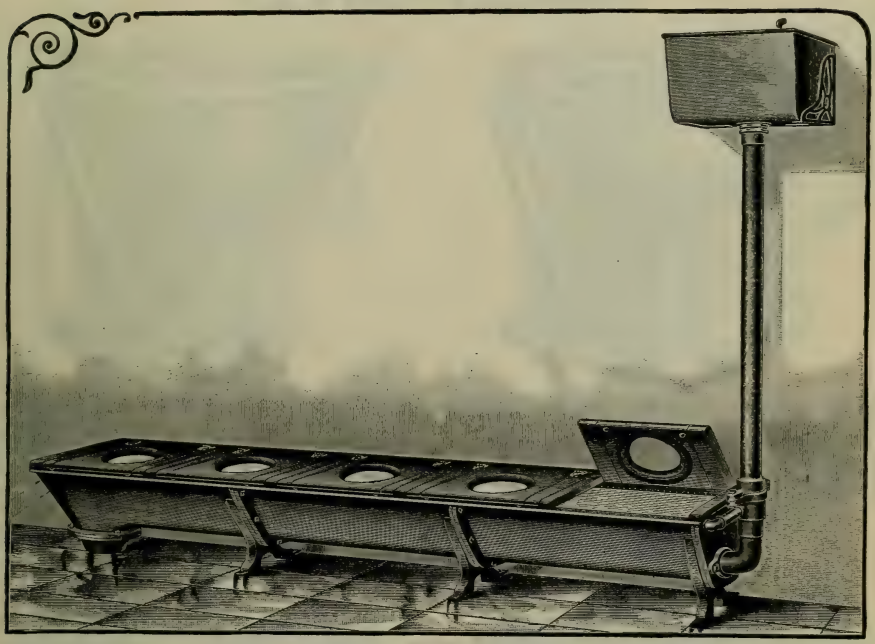
M-863.

Clow Automatic Flushing Washout Range Closet, Perforated Wash-down Pipes at front and back, Galvanized Iron Flush Pipe, Hardwood Top and Seats, Heavy Brass Hinges, Painted Cast Iron Partitions and Painted Iron Automatic Flushing Tank on Iron Support.

Length of Range.	Number of Seats.	Size of Seats.	Number of Partitions.	Price complete as described. Enameled.	Painted.
4 feet 0 inches.	2	24 inches.	3	$ 56.00	$ 46.00
6 " 0 "	3	24 "	4	74.25	59.00
8 " 0 "	4	24 "	5	95.75	75.25
10 " 0 "	5	24 "	6	113.75	88.25
12 " 0 "	6	24 "	7	134.75	103.75
14 " 0 "	7	24 "	8	152 75	116.75
16 " 0 "	8	24 "	9	170 75	129.50
18 " 0 "	9	24 "	10	188 75	142.25
20 " 0 "	10	24 "	11	206.75	154.75
4 " 6 "	2	27 "	3	58.50	47.50
6 " 9 "	3	27 "	4	77 75	61.50
9 " 0 "	4	27 "	5	101 00	78.25
11 " 3 "	5	27 "	6	120.50	92.00
13 " 6 "	6	27 "	7	143.00	108.50
15 " 9 "	7	27 "	8	162.50	122.00
18 " 0 "	8	27 "	9	182 00	135.50
20 " 3 "	9	27 "	10	201 50	148.75

If with Galvanized Partitions, add for each Partition, $3.00.
If with Galvanized Iron Reinforced Seat Bands, add for each Seat, $1.25.
If with Ventilating Extension and Collar as shown in M-852, add, Painted $7.00, Enameled $12.00.
In ordering, specify whether Right or Left-hand Outlet is desired.

CLOW WASHOUT RANGE CLOSETS.



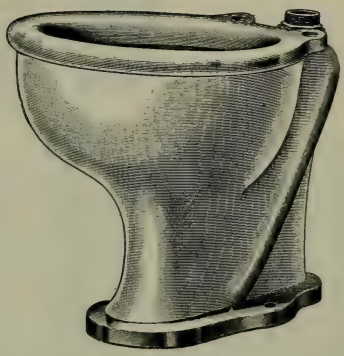
M-868.

Clow Automatic Flushing Washout Range Closet, Perforated Wash-Down Pipes at Front and Back, Galvanized Iron Flush Pipe, Hardwood Top and Seats, Heavy Brass Hinges and Painted Iron Automatic Flushing Tank with Painted Iron Brackets.

Length of Range.	Number of Seats.	Size of Seats.	Prices, complete as described. Enameled.	Painted.	Prices without Seats. Enameled.	Painted.
4 feet 0 inches.	2	24 inches.	$48.00	$37.00	$42.00	$31.00
6 " 0 "	3	24 "	64.00	47.00	55.00	38.00
8 " 0 "	4	24 "	83.00	61.00	71.00	49.00
10 " 0 "	5	24 "	99.00	70.00	84.00	55.00
12 " 0 "	6	24 "	118.00	83.00	100.00	65.00
14 " 0 "	7	24 "	133.00	93.00	112.00	72.00
16 " 0 "	8	24 "	149.00	103.00	125.00	79.00
18 " 0 "	9	24 "	164.00	112.00	137.00	85.00
20 " 0 "	10	24 "	180.00	122.00	150.00	92.00
4 " 6 "	2	27 "	51.00	39.00	45.00	33.00
6 " 9 "	3	27 "	68.00	49.00	59.00	40.00
9 " 0 "	4	27 "	89.00	64.00	77.00	52.00
11 " 3 "	5	27 "	106.00	75.00	91.00	60.00
13 " 6 "	6	27 "	127.00	88.00	109.00	70.00
15 " 9 "	7	27 "	142.00	99.00	123.00	78.00
18 " 0 "	8	27 "	161.00	109.00	137.00	85.00
20 " 3 "	9	27 "	178.00	119.00	151.00	92.00

If with Galvanized Iron reinforced Seat Bands, add for each Seat $1.25.
If with Ventilating Extension and Collar as shown in M-853, add, Painted $7.00, Enameled $12.00.
In ordering specify whether right or left hand Outlet is desired.

EARTHENWARE CLOSET BOWLS.



M-871.

Plain Roll Rim Siphon Jet with Seat Attachments.

Price,	each, $17.00
1¼-inch Spud,	extra, .50
Seat Attachment,	extra, net, .25

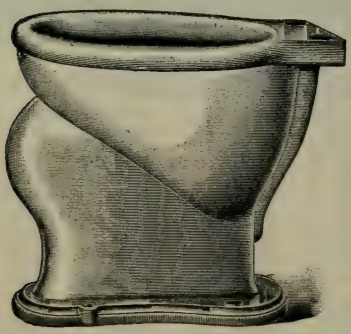


M-873.

Embossed Roll Rim Siphon Jet with Seat Attachments.

Price,	each, $18.00
1¼-inch Spud,	extra, .50
Seat Attachment,	extra, net, .25

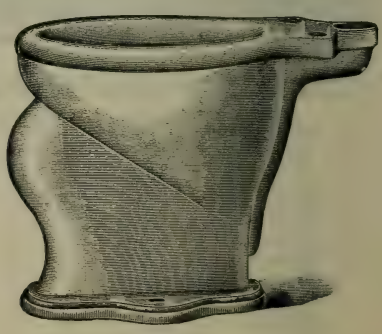
1½-inch Nickel-Plated Spuds,	list, $1.12
2-inch Nickel-Plated Spuds,	list, 1.30
1½-inch Nickel-Plated Slip Joint with nut, washer and flange	list, 1.25



M-875

Plain Roll Rim Wash-down Siphon with Jet and Seat Attachments.

Price,	each, $10.00
1¼-inch Spud,	extra, .40
Seat Attachment,	extra, net, .25



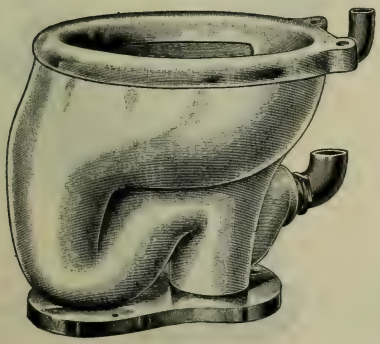
M-876.

Plain Roll Rim Wash-down with Jet, Top inlet for Flush and Seat Attachments.

Price,	each, $12.50
1¼-inch Spud,	extra, .50
Seat Attachment,	extra, net, .25

1½-inch Nickel-Plated Spuds,	list, $1.12
2-inch Nickel-Plated Spuds,	list, 1.30

EARTHENWARE CLOSET BOWLS.



M-879.

Plain Roll Rim Front Outlet Washout with Seat Attachment and Trap Vent.

Number 3, ... each, $8.00
Number 2, ... each, 10.25

Seat Attachments, Spuds and Couplings extra.



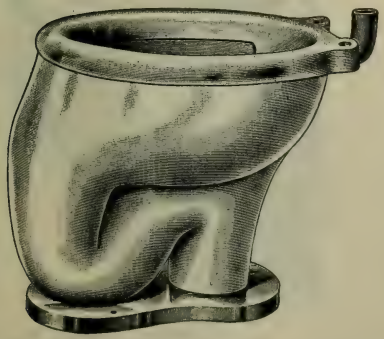
M-880.

Embossed Roll Rim Front Outlet Washout with Seat Attachment and Trap Vent.

Number 3, ... $9.00
Number 2, ... 11.25

Seat Attachments, Spuds and Couplings extra.

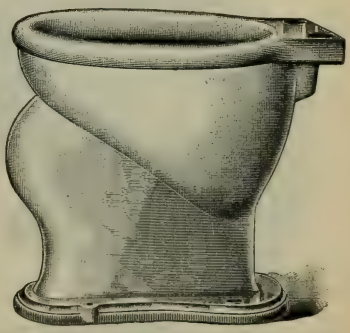
1¼-inch Spuds and Couplings, ... per set, $0.75
2-inch Spuds and Couplings, ... per set, 1.40
Spuds only, one-half above list.
Seat Attatchments, ... net, .25



M-882.

Plain Roll Rim Front Outlet Washout with Seat Attachment, without Trap Vent.

Number 3, ... each, $8.00
Number 2, ... each, 10.25
1¼-inch Spuds and Couplings, ... per set, 75
Spuds only, one-half above list.
Seat Attachments, ... extra, net, 25

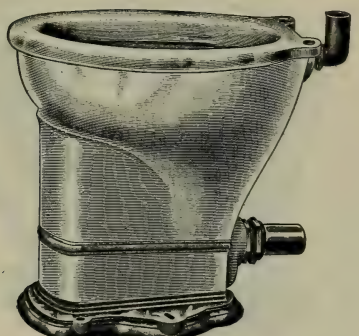


M-884.

Plain Roll Rim Wash-down Siphon with Seat Attachment.

Price, ... each, $8.50
1¼-inch Spud, ... extra, .40
Seat Attachment, ... extra, net, .25

EARTHENWARE CLOSET BOWLS.



M-888.

*Plain Roll Rim, Deep Seal, Combined Hopper and Trap with Seat Attachment and Trap Vent.

Price, each, $8.00
Seat Attachment, extra, net, .25
1¼-inch Spud and Coupling, per set, .75
2-inch Spud and Coupling, per set, 1.40
Spuds only, one-half above list.

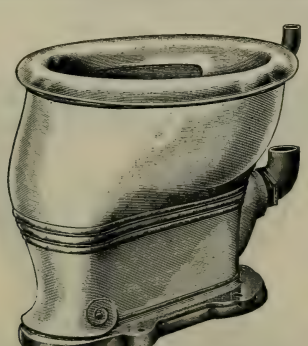


M-889.

Plain Roll Rim, Deep Seal, Combined Hopper and Trap with Seat Attachment and without Trap Vent.

Price, each, $8.00
Seat Attachment, extra, net, .25
1¼-inch Spud and Coupling, per set, .75
Spud only, one-half above list.

*Combined Hoppers and Traps will always be furnished with Vent at back, as shown, unless Right or Left Vent is specified.



M-892.

Plain Roll Rim, Front Outlet, Pedestal Washout with Seat Attachment and Trap Vent.

Number 3, each, $ 9.00
Number 2, each, 11.25
Seat Attachments, Spuds and Couplings extra.



M-893.

Embossed Roll Rim, Front Outlet, Pedestal Washout with Seat Attachment and Trap Vent.

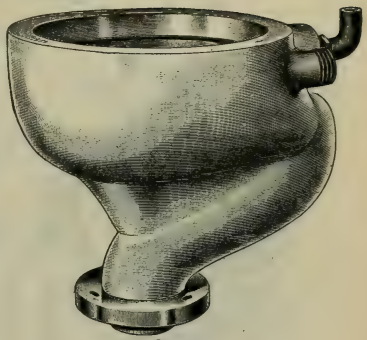
Number 3, each, $10.00
Number 2, each, 12.25
Seat Attachments, Spuds and Couplings extra.

1¼-inch Spuds and Couplings, per set, $0.75
2-inch Spuds and Couplings, per set, 1.40
Spuds only, one-half above list.
Seat Attachments, net, .25

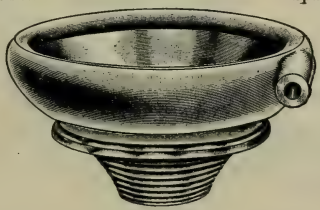
EARTHENWARE CLOSET BOWLS.



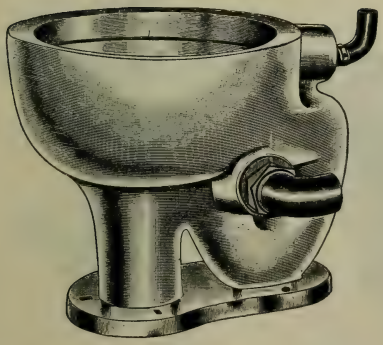
M-896.
Plain Front Outlet Offset Washout, Number 3.
Price, - - - - - - - - each, $8.00
1¼-inch Spud and Coupling, - - - per set, .75
Spuds only, one-half above list.



M-897.
Plain Back Outlet Offset Washout, Number 3.
Price, - - - - - - - - each, $8.00
1¼-inch Spud and Coupling, - - - per set, .75
Spud only, one-half above list.



M-899.
French Closet Bowl, - - - - - - - - - each, $2.25

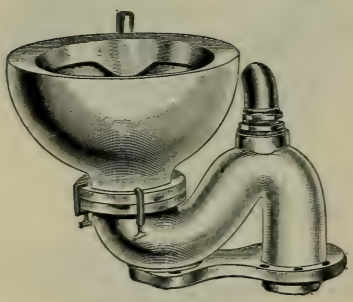


M-901.
Plain Back Outlet Washout with Right-hand Trap Vent.
Number 2, - - - - - - - each, $11.00
Number 3, - - - - - - - each, 8.00
Spuds and Couplings extra.
1¼-inch Spuds and Couplings, - - per set, $0.75; 2-inch Spuds and Couplings, - - per set, $1.40
Spuds only, one-half above list.



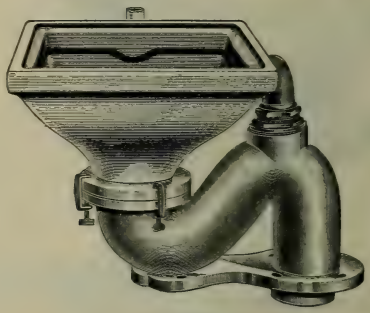
M-902.
Embossed Back Outlet Washout with Right-hand Trap Vent.
Number 2, - - - - - - - - each, $12.00
Number 3, - - - - - - - each, 9.00
Spuds and Couplings extra.

EARTHENWARE CLOSET BOWLS.



M-905.

Oval Short Hopper and Trap, Flushing Rim.
Price, Hopper only, ... $3 50
Price, Trap only, ... 3.00
Spuds, Couplings and Clamps extra.



M-906.

Square Short Hopper and Trap, Flushing Rim.
Price, Hopper only, ... $5 00
Price, Trap only, ... 3.00
Spuds, Couplings and Clamps extra.

1¼-inch Spuds and Couplings, ... per set, $0.75
2-inch Spuds and Couplings, ... per set, 1 40
Spuds only, one-half above list.
Clamps, per set of four, ... 1 00



M-909.

Tall Round Hopper with Roll Flushing Rim and Seat Attachment.
Price, ... $5.00
1¼-in. Spud and Coupling, per set 75
Spuds only, one-half above list.
Seat Attachments, . extra, net, .25



M-910.

Tall Oval Hopper with Roll Flushing Rim and Seat Attachment.
Price, ... $6.50
1¼-in. Spud and Coupling, per set .75
Spuds only, one-half above list.
Seat Attachments, . extra, net, .25



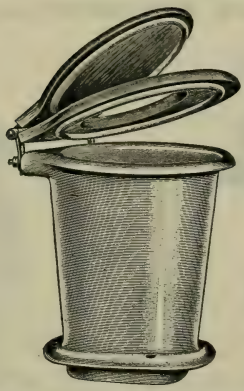
M-911.

Plain Tall Hopper, Philadelphia pattern.
Price, ... $4 50

CAR EARTHENWARE.

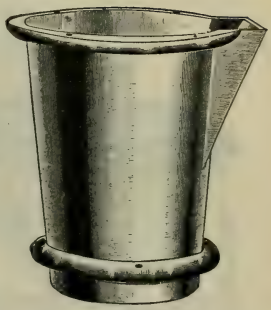


M-915.
HOPPER, AMERICAN PATTERN.
Price, - - each, $8.70

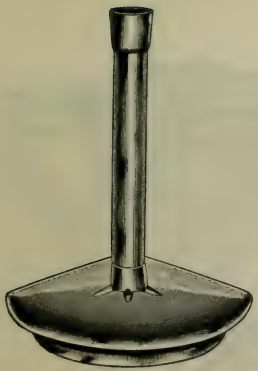


M-916. MADDEN PATENT CAR HOPPER.

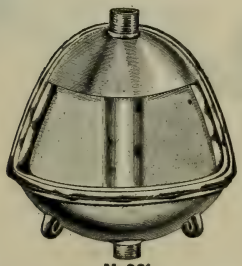
The Madden Patent Car Hopper overcomes many objections in other styles of dry hoppers. It occupies less space, is neat in appearance and is absolutely dust proof. Made also in Enameled Iron. See page 495.
Price, complete with Natural Quartered Oak Seat and Cover, - - $20.00
Price, complete with Cherry or Mahogany Seat and Cover, - - - 22.50



M-917.
HOPPER, PULLMAN PATTERN.
Price, - - - each, $10.80



M-920.
DRIP PIPE AND PAN.



M-921.
CAP, TAB AND VENT URINAL.
Price, - - - each, $8.80

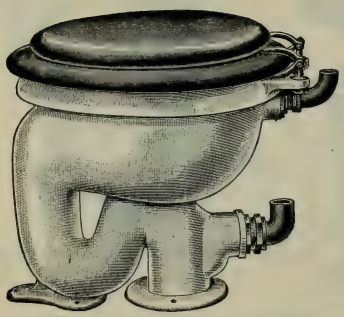


M-923.
PLAIN URINAL.
Price, - - - each, $4.75

DRIP PIPES AND PANS.—M-920.

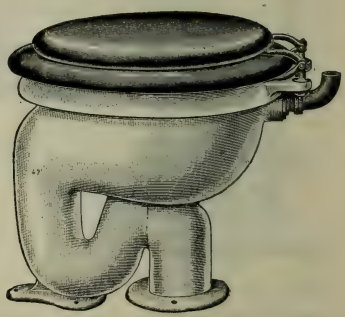
LENGTH OF PIPE . . . . . INCHES	9	16	16½	17	18	20
PER DOZEN	16.00	24.00	24.00	24.00	24.00	24.00
DRIP PANS, SIZE 12×12 INCHES . . . . . PER DOZEN	----	----	----	----	----	45.00

ENAMELED IRON WATER CLOSETS.



M-925. IRON WASHOUT WITH VENT.

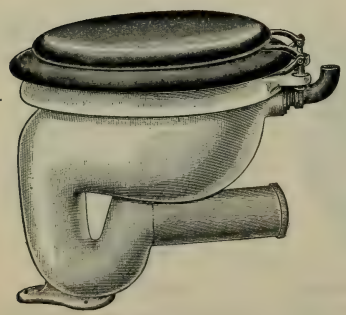
Enameled inside and outside, with Oak Seat, complete, ... $17.50
Enameled inside and Painted outside, with Oak Seat, complete, ... 15.75



M-926. IRON WASHOUT WITHOUT VENT.

Enameled inside and outside, with Oak Seat, complete, ... $16.50
Enameled inside and Painted outside, with Oak Seat, complete, ... 14.75

If without Seat and Cover, deduct $3.00



M-929. IRON WASHOUT WITH P TRAP.

Enameled inside and outside, with Oak Seat, complete, ... $16.50
Enameled inside and Painted outside, with Oak Seat, complete, ... 14.75



M-930. IRON WASH-DOWN SIPHON.

Enameled inside and outside, with Oak Seat, complete, ... $21.00
Enameled inside and Painted outside, with Oak Seat, complete, ... 18.75

If without Seat and Cover, deduct $3.00

ENAMELED IRON WATER CLOSETS.

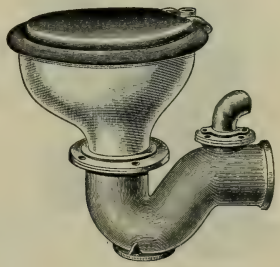


M-935.

Iron Short Oval Hopper with roll flushing rim, S trap with vent and flanged floor connection for lead pipe.

Enameled inside and outside, with oak seat, complete - - - - - - - - $13.50

Enameled inside and on rim, painted outside, with seat, complete - - - - - - - - $11.00



M-936.

Short Oval Iron Hopper with roll flushing rim, P trap to connect to soil pipe.

Enameled inside and outside, with oak seat, complete - - - - - - - - $13.50

Enameled inside and on rim, painted outside, with oak seat, complete - - - - - - - $11.00

If without seat, deduct $3.00. M-935 can be furnished with spigot outlet to connect to soil pipe when so ordered.



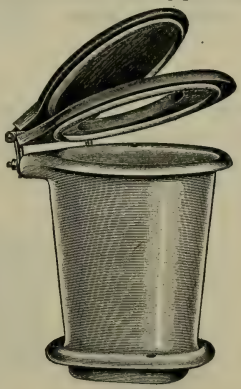
M-939.

Tall Oval Iron Hopper with roll flushing rim and brass spud connection.

Enameled inside and outside, with oak seat - - - - each, $10.50

Enameled inside and on rim, with oak seat - - - - each, $9.50

If without seat, deduct $2.50.



M-940.

Madden patent Iron Car Hopper.

Enameled inside and outside, with quarter-sawed oak seat and cover and dust proof ring - - each, $20.00

See page 493 for Earthenware Car Hoppers.



M-941.

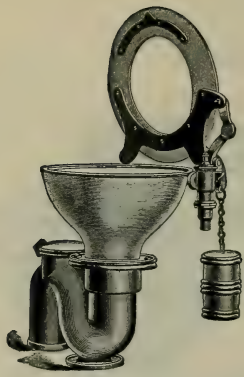
Round Pattern Iron Hopper with roll flushing rim and brass spud connection.

Enameled inside and outside, with oak seat - - - - each, $9.50

Enameled inside and on rim, with oak seat - - - - each, $8.50

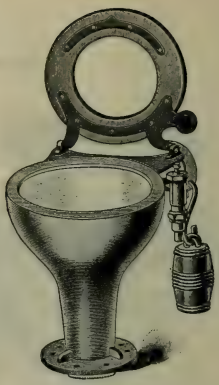
If without seat, deduct $2.50.

ENAMELED IRON SELF-ACTING HOPPER CLOSETS.



M-945.

Short Round Iron Hopper on trap, with self-raising seat and double-acting valve.
Enameled inside and on rim . . each, $10.50



M-946.

Tall Round Iron Hopper, with self-raising seat and double-acting valve.
Enameled inside and on rim . . . each, $9.50

PHILADELPHIA HOPPERS.

ENAMELED INSIDE.



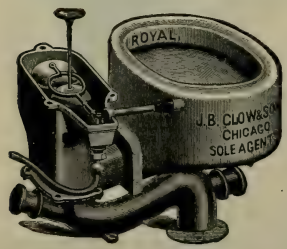
M-949. OLD STYLE.

Price, each $1.75



M-950. NEW STYLE.

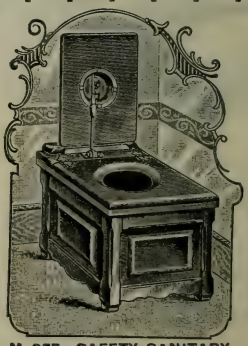
Price, each $2.00



M-953. ROYAL PLUNGER CLOSET WITH TRAP.

Each $18.00
Bowls only . . . . . each, 6.00
Valves only . . . . . each, 5.00



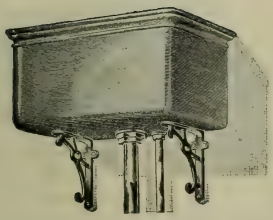


M-955. SAFETY SANITARY COMMODE.

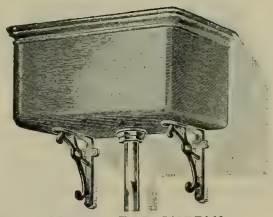
Each $20.00

Send for Special Circular.

CLOSET TANKS.



M-965. BOTTOM SUPPLY

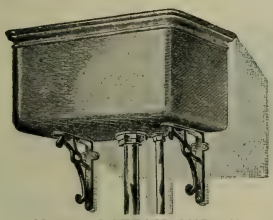


M-966. TOP SUPPLY.

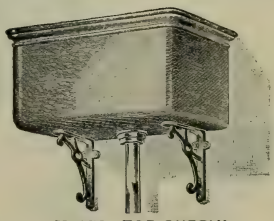
CLOW STANDARD SIPHON TANKS.

Dimensions, 17x8x10 inches inside. Capacity, 5 gallons. Outlet Coupling, 1¼ inches in diameter. Tank, complete, either Top or Bottom Supply, Natural Oak, Cabinet Finish, ... $8.50

Top Supply Tanks have tail pieces threaded for ⅜-inch iron pipe.



M-969. BOTTOM SUPPLY.



M-970. TOP SUPPLY.

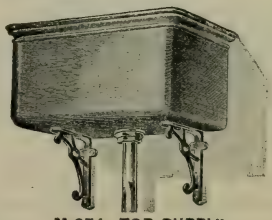
CLOW SIPHON JET TANKS.

Dimensions, 18x10x10 inches inside. Capacity, 7 gallons. Outlet Coupling, 1½ inches in diameter. Tank, complete, Top or Bottom Supply, Natural Oak, Cabinet Finish, ... $11.00

We recommend this size of Tank for use with Siphon Jet Closet Bowls.



M-973. BOTTOM SUPPLY.



M-974. TOP SUPPLY.

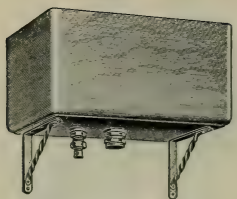
EXTRA LARGE SIPHON TANKS.

Dimensions, 22x11x10 inches inside. Capacity, 10 gallons. Outlet Coupling, 1½ inches in diameter. Tank, complete, Top or Bottom Supply, Natural Oak, Cabinet Finish, ... $18.00

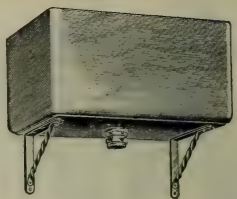
The above Tanks are furnished complete with all Trimmings, ready to set up. They are carried in stock in Natural Oak only. Antique Oak, Light or Dark Cherry and other woods furnished when ordered, at additional cost.

The Clow Ball Cock, patented, is of exclusive design, simple in construction, practically noiseless and suitable for either high or low pressure.

CLOSET TANKS.



M-979. BOTTOM SUPPLY.



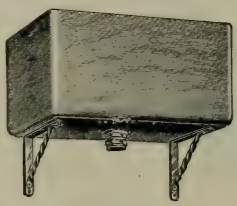
M-980. TOP SUPPLY.

LAKESIDE SIPHON TANKS.

Standard Size, 17x8x10 inches inside; Capacity, 5 gallons . . . . . each, $ 7.00
Medium Size, 18x10x10 inches inside; Capacity, 7 gallons . . . . . each, 9.00
Large Size, 22x11x10 inches inside; Capacity, 10 gallons . . . . . each, 14.00

Lakeside Tanks are furnished in Plain Oak only, finished with two coats of varnish, and are complete with Brackets, Chain and Pull.

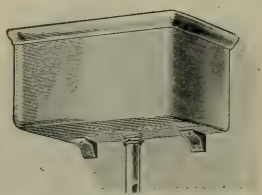
Top Supply Tanks have tail pieces threaded for ⅜-inch iron pipe.



M-982.
EXTRA LARGE TANK.

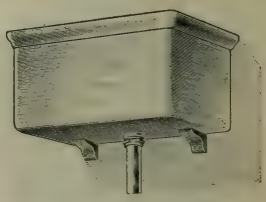
		15 Gal.	25 Gal.	30 Gal.	40 Gal.
Size of Outlet Coupling	inches,	1¼	2	2½	2½
Plain Oak	each,	$19.00	$29.00	$35.00	$50.00

These Tanks are especially useful where the water supply is limited or may not flow at times. The Tanks are so constructed that when the pull is released, after having been drawn down, three gallons of water only are used at each operation.



M-985. IRON SALT WATER TANK.

CLOW
SPECIAL



M-986. ENAMELED IRON TANK.

CLOW IMPROVED IRON TANKS.

Standard Size, 17x8x10 inches; Capacity, 5 gallons.
Each $12.00
Large Size, 20x10x10 inches; Capacity, 8 gallons.
Each 16.00

This Tank is enameled inside to prevent rusting and finished outside with CLOW SPECIAL NON-CONDENSING TANK ENAMEL.

Standard Size, 17x8x10 inches; Capacity, 5 gallons.
Enameled inside and painted outside . each, $10.00
Enameled inside and outside . . each, 12.00
Large Size, 20x10x10 inches; Capacity, 8 gallons.
Enameled inside and painted outside . each, 14.00
Enameled inside and outside . . each, 16.00

An indestructible Tank recommended for warm climates and damp places.

WATER CLOSET SEATS.



M-990.

Seat with Cover and Nickel Plated Standard Hinges to attach to closet bowl.

Size No. 1, Natural Oak - - - - each, $4.50
Size No. 2, Natural Oak - - - - each, 5.00



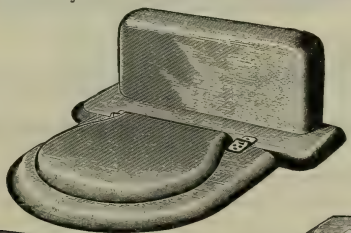
M-991.

Seat without Cover, with Nickel Plated Standard Hinges to attach to closet bowl.

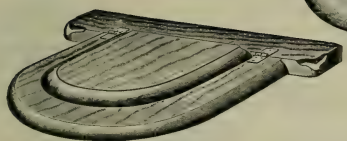
Size No. 1, Natural Oak - - - - each, $4.25
Size No. 2, Natural Oak - - - - each, 4.75

The No. 1 Seat is for use on No. 3 washouts, oval and round hoppers and washdowns. The No. 2 Seat is for use on No. 2 washouts, pedestals and siphon jets.

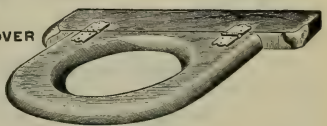
Seats made of Antique Oak, Light or Dark Cherry and other woods furnished when ordered, at additional cost.



M-998. SEAT, WITH COVER AND BACK.

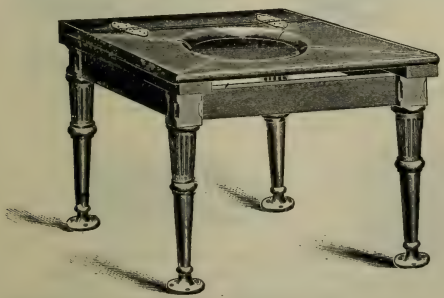


M-999. SEAT, WITH COVER.



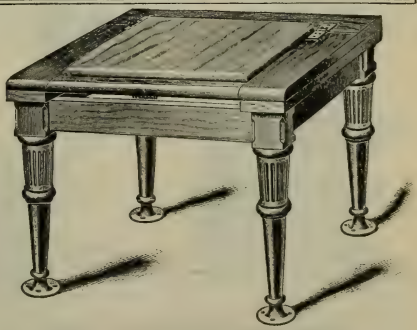
M-1000. SEAT.

FIGURE	M-998	M-999	M-1000
NATURAL OAK . . . . . EACH	3.50	3.00	2.50



M-1003. HOPPER SEAT.

Natural Oak - - - - - each, $3.00



M-1004. HOPPER SEAT, WITH COVER.

Natural Oak - - - - - each, $3.50

Heavy Legs, japanned, each, 60 cents; galvanized, each, 80 cents; Light, painted, each, 40 cents.

Hopper Seats with Self-Acting Attachments for operating Fore and After Wash Tanks, add to list of Seat, $1.00.



M-994. STEEL SEAT WITH COVER.

White Enameled, - - - - - - each, 3.50



M-995. STEEL SEAT WITHOUT COVER.

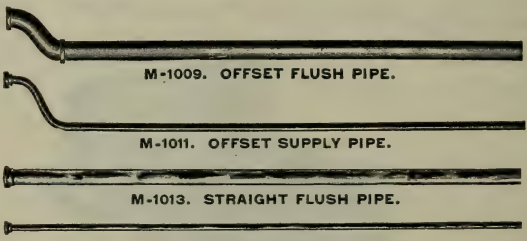
White Enameled, - - - - - - each, 3.25

These Seats are coated inside and outside with white enamel.



M-997. N. P. BRASS GUIDE.

With Ring Pull, 3.00



M-1009. OFFSET FLUSH PIPE.

M-1011. OFFSET SUPPLY PIPE.

M-1013. STRAIGHT FLUSH PIPE.

M-1015. STRAIGHT SUPPLY PIPE.



M-999. N. P. BRASS WALL GUIDE.

With China Pull, 3.50
Hardwood Pull, 3.00

CLOSET FLUSH PIPES.

SIZE - - - - - - - - - - - - INCHES	$1\frac{3}{8}$	$1\frac{1}{2}$
OFFSET PIPE, NICKEL PLATED - EACH	3.00	4.00
STRAIGHT PIPE, NICKEL PLATED, EACH	2.75	3.25

CLOSET SUPPLY PIPES.

SIZE - - - - - - - - - - - - INCHES	$\frac{9}{16}$"	$\frac{3}{8}$ I.P.	$\frac{1}{2}$ I.P.
OFFSET PIPE, N. P. - - - - - - EACH	2.50	4.75	6.75
STRAIGHT PIPE, N. P. - - - - EACH	2.40	4.50	6.50



M-1019. PLAIN PIPE HOLDER.

For $1\frac{3}{8}$, $1\frac{1}{2}$ Tubing, $\frac{3}{8}$, $\frac{1}{2}$ I. P. Size Tubing, each, .75



M-1021. PIPE HOLDER WITH BUFFER.

For $1\frac{3}{8}$, $1\frac{1}{2}$ Tubing, each, 1.00



M-1023. PLAIN PIPE HOLDER, SPLIT.

For $1\frac{3}{8}$, $1\frac{1}{2}$ Tubing, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, I. P. Size, each, .85



M-1025. PIPE HOLDER WITH BUFFER, SPLIT.

For $1\frac{3}{8}$, $1\frac{1}{2}$ Tubing, each, 1.20



M-1027. DOUBLE PIPE HOLDER WITH BUFFER.



M-1029. DOUBLE OFFSET PIPE HOLDER WITH BUFFER.

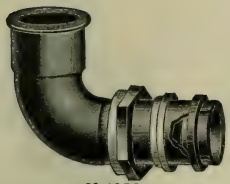
FIGURE - - - - - - - - - - - - - - - NUMBER	M-1027	M-1029
FOR $1\frac{3}{8}$-IN. FLUSH AND $\frac{3}{8}$-IN. I. P. SIZE PIPE - - - - EACH	1.50	1.00
FOR $1\frac{3}{8}$-IN. FLUSH AND $\frac{1}{2}$-IN. I. P. SIZE PIPE - - - - EACH	1.50	1.25
FOR $1\frac{1}{2}$-IN. FLUSH AND $\frac{3}{8}$-IN. I. P. SIZE PIPE - - - - EACH	1.75	1.25
FOR $1\frac{1}{2}$-IN. FLUSH AND $\frac{1}{2}$-IN. I. P. SIZE PIPE - - - - EACH	1.75	1.50



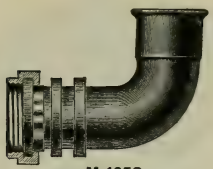
M-1031. NICKEL PLATED SPUN FLANGES.

SIZE - IN.	*$\frac{3}{8}$	*$\frac{1}{2}$	$\frac{9}{16}$"	*$\frac{3}{4}$	*1	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	2
EACH - -	.12	.12	.15	.15	.15	.15	.18	.18	25

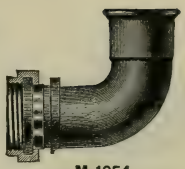
*For Iron Pipe Size Pipe.



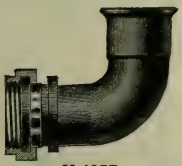
M-1052.
NO. 29. 1¼-INCH.



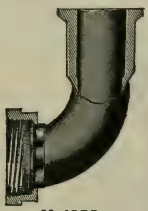
M-1053.
NO. 4A. 1¼-INCH, FULL LENGTH, 5 INCHES FROM FACE TO BACK.



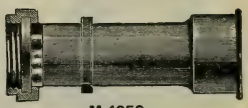
M-1054.
NO. 6AA. 1¼-INCH.



M-1057.
NO. 6A. FOR 2-INCH VENT, TO SLIP OVER 1¼-INCH L. P.



M-1058.
NO. 28. FOR 2-INCH VENT, TO SLIP OVER 2-INCH I. OR L. P.



M-1059.
NO. 8. FOR 2-INCH VENT, TO SLIP OVER 2-INCH I. OR L. P.

RICKETT'S RUBBER CLOSET CONNECTIONS.

NUMBER	29	4A	6AA	6A	28	8
PER DOZEN	7.00	11.00	15.00	15.00	14.00	14.00



M-1063.

SUPERIOR RUBBER ELBOWS.—M-1063.

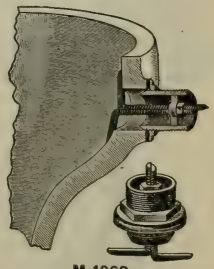
1¼ X 1¼ BENT OR STRAIGHT, FOR SUPPLY	PER DOZEN	6.00
1½ X 1½ BENT OR STRAIGHT, FOR SUPPLY	PER DOZEN	9.00
1½ X 1½ BENT OR STRAIGHT, FOR SUPPLY	PER DOZEN	9.00
1½ X 2 BENT OR STRAIGHT, FOR VENT	PER DOZEN	12.00
2 X 2 BENT OR STRAIGHT, FOR VENT	PER DOZEN	12.00



M-1065.
ROBB COUPLING.



M-1066.
OHLIGER CONNECTION.



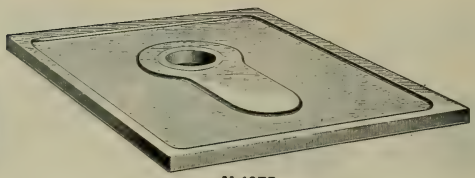
M-1068.
CLOSET REPAIR COUPLING.

FIGURE	M-1065.	M-1066.	M-1068. 1¼-inch.	M-1068. 2-inch.
PER DOZEN	1.50	1.25	18.00	24.00



M-1073.
FLOOR FLANGE.

Flange with Bolts, N. P. Washers and Gasket . each, 1.50



M-1075.
MARBLE FLOOR SLAB.
(PRICE UPON APPLICATION.)



M-1077.
FLOOR FLANGE, THREADED.

Complete with Bolts, N. P. Washers and Gasket.
4-inch Male Thread, . each, 4.00
4-inch Female Thread, each, 4.50



M-1080. RUBBER
FLOOR FLANGE GASKET.

Price . . . each, .30



M-1082.
FLOOR FLANGE BOLT.

Nickel-Plated Nut and Brass Bolt.
Price . . each, .20



M-1084.
SWIVEL.

Price, each, .75



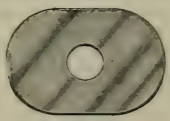
M-1086.
CHAIN GUIDE.

To go through Marble Tank Casing.
Price . . . each, 1.00



M-1088.
LOOSE HEAD SCREW.

Brass Screw for closet bases, with Nickel-Plated Nut.
Price . per doz., 2.25



M-1090.
CLOSET PLATE.

Price, per doz., .75



M-1092.
CLAMP.

Galv. Iron, each, .12
N. P. Brass, each, .30



M-1094.
CLAMP.

For Hopper and Trap Closets.
Price . . . each, .25



M-1097. WOOD PULL.

Oak Closet Pulls, . . per doz., 5.00
Genuine Ebony Closet Pulls, . . per doz., 8.00
White China Closet Pulls, . . per doz., 18.00



M-1099. CHINA PULL.



M-1101. S HOOK.

Small, . per doz., .30
Medium, per doz., .50
Large, . per doz., .75



M-1104. SNAP.

Small, per doz., .50
Large, per doz., .75



M-1110. OFFSET SLIP JOINT.

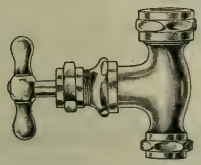


M-1112. DOUBLE SLIP JOINT.



M-1114. SLIP JOINT.

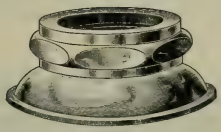
SIZE FOR TUBING . . . . . INCHES	$1\frac{3}{8}$	$1\frac{1}{2}$
M-1110. OFFSET SLIP JOINT, RIGHT OR LEFT, NICKEL PLATED . . . . . EACH	3.00	4.00
M-1112. DOUBLE SLIP JOINT, NICKEL PLATED. . . . . EACH	1.50	1.50
M-1114. SLIP JOINT TO CONNECT FLUSH PIPE TO BOWL, NICKEL PLATED . . . . . EACH	1.40	2.00



M-1117.

N. P. Stop Cock, with Slip Joint for Supply Pipe to Tanks.

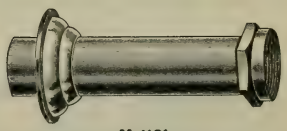
$\frac{3}{8}$-inch, ... each, 1.00
$\frac{1}{2}$-inch, ... each, 1.50



M-1119.

N. P. Slip Joint Nut with Rubber Washer and N. P. Flange.

For $1\frac{1}{2}$-inch Spud and $1\frac{3}{8}$-inch Flush Pipe, . . . each, .40
For $1\frac{1}{2}$-inch Spud and $1\frac{1}{2}$-inch Flush Pipe, . . . each, .50



M-1121.

2-inch N. P. Vent Connection, $9\frac{1}{2}$ inches long.

Each, ... 1.75



M-1124.

Swivel Turnbuckle for Frost-Proof Closet Cables.

Galvanized, ... each, .50



M-1126.

Copper Cable for Frost-Proof Closets.

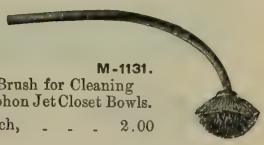
Per foot, ...20



M-1128.

Copper Closet Pan.

Each, ... 1.00



M-1131.

Brush for Cleaning Siphon Jet Closet Bowls.

Each, ... 2.00



M-1135.

Float Valve for Closet Tanks. Dececo Pattern.

Each, ... 5.00



M-1137.

Float Valve for Buena Tanks.

Nickel Plated, ... each, 5.00



M-1139.

Float Valve for Madden Closet Tanks.

Nickel Plated, ... each, 4.00

PARTS FOR CLOSET TANKS.



M-1145.
Copper Bell Siphon.
1¼-inch, . each, 1.50
1½-inch, . each, 2.00



M-1147.
Galvanized Goose Neck Siphon.
1¼-inch, . each, 1.50
1½-inch, . each, 2.00



M-1149.
Galvanized Bell Siphon.
1¼-inch, . each, 1.50



M-1152.
Siphon Base.
1¼-inch, . each, 1.00
1½-inch, . each, 1.50



M-1154.
Flush Nut and Tail Piece.
1¼-inch, . each, .50
1½-inch, . each, .75



M-1156.
Rubber Siphon Ring.
1¼-inch, . . each, .20
1½-inch, . . each, .30

M-1159.
Lever with Loop for Siphon.
Each, ...40



M-1161.
Tank Lever.
Each, ...50



M-1163.
Tank Lever.
Each, ...40



M-1166.
Bridge.
Each, ...40



M-1168.
Top Supply Ball Cock Bridge.
Each, ...40



M-1170.
Top Supply Ball Cock Holder.
Each, ...30



M-1173.
Fulcrum for Lever.
Each, . . .15



M-1175.
Bridge for Lever and Ball Cock.
Each, ...40



M-1177.
Tank Bridge.
Each, ...50



M-1180.
Angle Strap, to hold top of tank to wall.
Each, ...15



M-1182.
Clip, to hold top of tank to wall.
Each, ...10



M-1185.
Adjustable Lever for Ball Cock.
Each, ...30



M-1188.



M-1190.
Tail Pieces for Ball Cock, lead or iron pipe.
Each, ...20



M-1192.



M-1194.
Tail Pieces for Bottom Supply Ball Cocks, lead or iron pipe.
Each, ...20

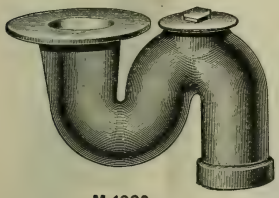
M-1197.
Cup Leather for Ball Cock.
Each, ...10



M-1199.
Hard Rubber Acorn Packing for Ball Cock.
Each, ...15

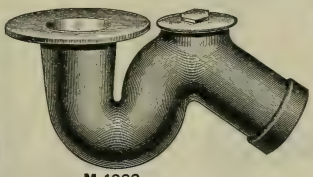
CAST-IRON SANITARY CLOSET TRAPS.

ENAMELED INSIDE AND ASPHALTED OUTSIDE, FLANGED TO BOLT TO BASE OF CLOSETS AND SET BENEATH THE FLOOR, AND WITH BRASS CLEAN-OUT CAP.



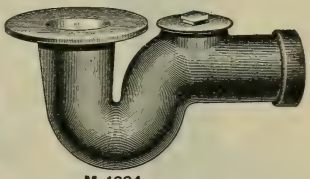
M-1220.

Full S Pattern; outlet threaded for 4-inch iron pipe.



M-1222.

Three-quarter S Pattern; outlet threaded for 4-inch iron pipe.



M-1224.

Half S Pattern; outlet threaded for 4-inch iron pipe.



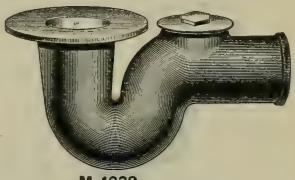
M-1228.

Full S Pattern, with spigot outlet to calk into 4-inch pipe.



M-1230.

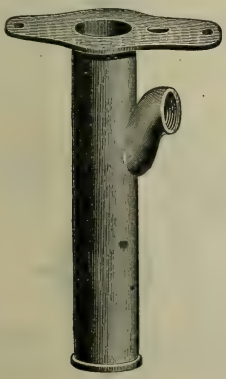
Three-quarter S Pattern, with spigot outlet to calk into 4-inch pipe.



M-1232.

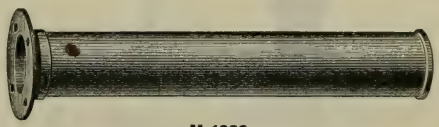
Half S Pattern, with spigot outlet to calk into 4-inch pipe.

PRICES UPON APPLICATION.



M-1235.

Flanged, Closet Base Fitting, made in lengths from 24 inches to 48 inches, and with flanges to fit the base of any of our Madden Closets, also made without vent; especially adapted for use in connection with our Iron Siphon Auto-Jet M-166.



M-1238.

Cast-iron Pipe, with flange on one end to bolt onto base of frost-proof Closet, 5 feet long.



M-1240.

Graduated Drainage Fitting, used in connection with our Iron Closets when arranged in batteries of two or more.

See Closet M-200, page 455.

BALL COCKS FOR CLOSET TANKS.

CLOW © SPECIAL



M-1200.
CLOW SPECIAL BOTTOM SUPPLY BALL COCK.

With Ball and Stem complete, - each, $3.00
Without Ball and Stem, - - each, 2.50
If with Iron Pipe Tail Piece, add 15c.



M-1201.
CLOW SPECIAL TOP SUPPLY BALL COCK.

With Ball and Stem complete, - each, $3.00
Without Ball and Stem, - - each, 2.50
If with Iron Pipe Tail Piece, add 15c.

CLOW STANDARD BALL COCKS.



M-1204. BOTTOM SUPPLY.

With Ball and Stem complete, - - each, $2.75
Without Ball and Stem, - - - - each, 2.25
If with Iron Pipe Tail Piece, add 15c.



M-1205. TOP SUPPLY.

With Ball and Stem complete, - - each, $2.75
Without Ball and Stem, - - - - each, 2.25
If with Iron Pipe Tail Piece, add 15c.



*M-1208. WITH LEVER.



†M-1209. TAPPED, FOR IRON PIPE.

COPPER BALLS.

SIZE - INCHES	5	6	7	8	9	10	12
M-1208 - PER DOZEN	6.00	7.00	10.50	24.00	36.00	48.00	72.00
M-1209 - PER DOZEN	4.00	6.00	9.00	15.00	25.00	40.00	60.00

*M-1208. NOTE.—Spuds are tapped 14-20 thread for Closet Tanks.

†M-1209. NOTE.—Spuds are tapped for standard iron pipe thread, 8-inch and smaller tapped ¼ inch; 9-inch and larger tapped ½ inch.

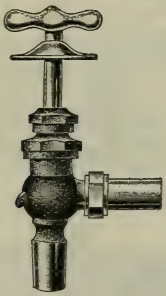
HOPPER COCKS.



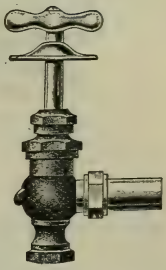
M-1215.
FOR LEAD PIPE.



M-1216.
FOR LEAD AND IRON PIPE.



M-1217.
LEAD PIPE WITH UNION.



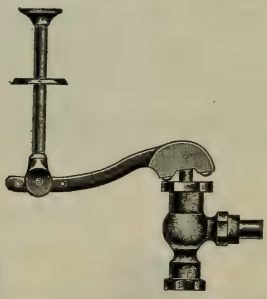
M-1218.
IRON PIPE WITH UNION.

COMPRESSION HOPPER COCKS.

SIZE . . . . . INCHES	½	⅝	¾
M-1215. ROUGH BODY, FINISHED FLANGE AND HANDLE . . . . . PER DOZEN	16.00	19.00	24.00
M-1216. ROUGH BODY, FINISHED FLANGE AND HANDLE . . . . . PER DOZEN	17.00	20.00	26.00
M-1217. ROUGH BODY, FINISHED FLANGE AND HANDLE . . . . . PER DOZEN	23.00	27.00	35.00
M-1218. ROUGH BODY, FINISHED FLANGE AND HANDLE . . . . . PER DOZEN	24.00	28.00	37.00



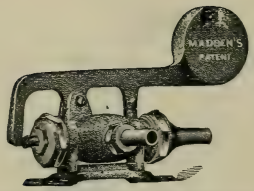
M-1225. HOPPER COCK, L. P.



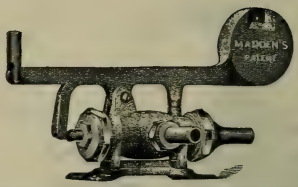
M-1226. CALIFORNIA PATTERN, L. P.

LONG SELF-CLOSING HOPPER COCKS.—M-1225 and M-1226.

SIZE . . . . . INCHES	½	⅝	¾
M-1225. FINISHED FLANGE AND HANDLE . . . . . PER DOZEN	24.00	26.00	30.00
M-1225. NICKEL PLATED FLANGE AND HANDLE . . . . . PER DOZEN	26.00	28.50	32.50
M-1226. FINISHED FLANGE AND HANDLE . . . . . PER DOZEN	30.00	-----	-----
M-1226. NICKEL PLATED FLANGE AND HANDLE . . . . . PER DOZEN	32.50	-----	-----



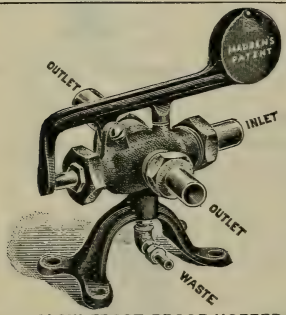
M-1232. CLOW IMPROVED CHECK AND WASTE.



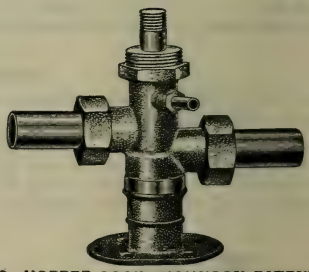
M-1233. CLOW IMPROVED HOPPER COCK.

CLOW IMPROVED HOPPER AND STOP AND WASTE COCKS.—M-1232 and M-1233.

M-1232. LEAD PIPE	EACH	4.50
M-1232. IRON PIPE	EACH	5.00
M-1233. LEAD PIPE	EACH	5.00
M-1233. IRON PIPE	EACH	5.50



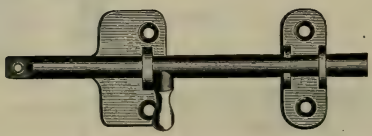
M-1237. CLOW FROST-PROOF HOPPER VALVE.



M-1238. HOPPER COCK. (JOHNSON PATENT.)

FROST-PROOF VALVES AND HOPPER COCKS.—M-1237 and M-1238.

M-1237.	EACH	6.50
M-1238. JOHNSON	EACH	1.50



M-1242. GALVANIZED IRON LATCH.



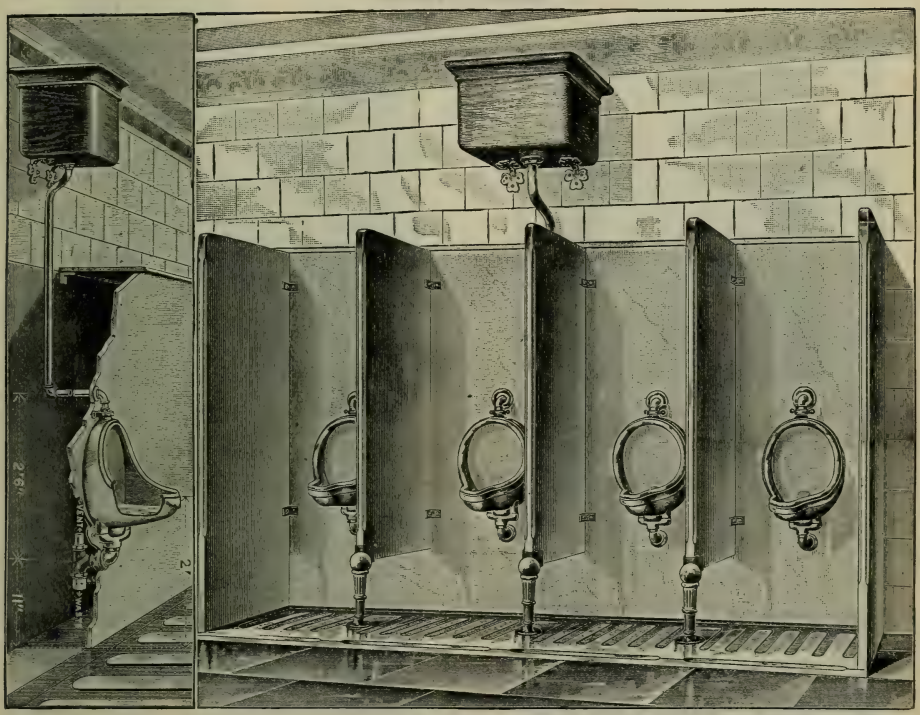
M-1243. ROTARY STOP AND WASTE LATCH.

LATCHES FOR STOP AND WASTE COCKS.—M-1242 and M-1243.

IRON LATCH, GALVANIZED	EACH	.75
ROTARY LATCH, JAPANNED	EACH	.75
RED METAL CHAIN	PER FOOT	.08

CLOW AUTOMATIC SIPHON JET URINALS.

MADDEN'S PATENT.



N-1.

Siphon Jet Adamantose Lipped Urinals, Round Cornered Oak Copper Lined Automatic Flushing Tank, Nickel-Plated Brass Tank Supports and Flush Pipe where exposed, Rough Brass Connections back of Stalls, Inlet and Outlet Connections.

Dimensions of Stalls: Height, 5 feet; width, 2 feet; depth, Ends, 2 feet 6 inches; Partitions, 1 foot 8 inches; thickness, Ends, Partitions, Backs and Capping, ¾ inch; Base, 1¼ inches. Waste for Single Urinal, 2-inch; for battery of two to five Urinals, inclusive, 3-inch; for battery of six or more Urinals, 4-inch Waste Pipe.

Number of Stalls,	1	2	3	4	5
Urinals complete, without Stalls,	$ 38.00	$ 69.00	$100.00	$130.00	$162.00
Urinals with Slate Stalls, complete,	67.00	118.00	169.00	219.00	271.00
Urinals with Tennessee Marble Stalls, complete,	93.00	157.00	221.00	284.00	349.00
Urinals with Italian Marble Stalls, complete as shown,	106.00	179.00	250.00	320.00	392.00

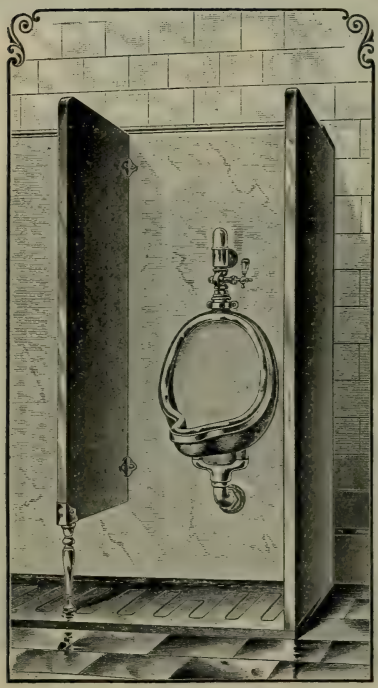
Our Automatic Siphon Jet Urinal is similar in principle of construction and operation to the Madden Siphon Jet Closet. Urinal contains a sufficent body of water to deodorize urine. Tank is automatic in operation, discharging its contents into the Urinal at intervals that can be regulated to suit requirements.

A strong siphonic action through the 2-inch Outlet Pipes, when Tank is discharging, carries into the sewer all foreign substances thrown into the Bowl, thoroughly cleansing Bowl and Waste Pipes and positively preventing all stoppage—a great advantage over the ordinary type of Urinal.

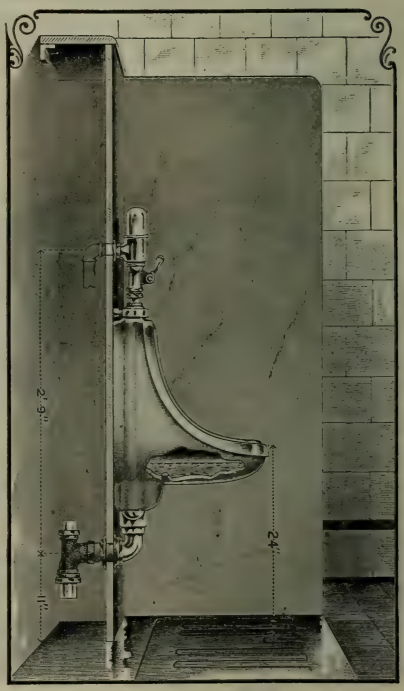
Flush Pipe and Waste Outlet can be arranged in front of marble, if desired, without extra charge. Tank can be made to operate with Pull in connection with Automatic Flush.

CLOW SIPHON JET AUTOMETER URINAL.

MADDEN'S PATENT.



N-3.



N-3. SIDE VIEW.

Clow Siphon Jet Adamantose Lipped Urinal, Nickel Plated Outlet and Autometer.

Price, without Stall, complete as described, - - - - - - - - - - - - - - $40.00

Furnished with Waste to floor, if desired, at the same price.
Prices of Fixtures with Slate or Marble Stalls, upon application.

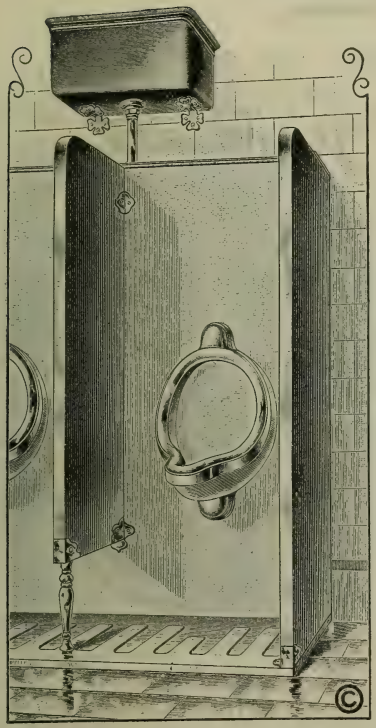
The Clow Siphon Jet Urinal (Madden's Patent) is similar in construction and operation to the Madden Siphon Jet Closet.

This Urinal, like our Closets, is in every respect a sanitary, hygienic and durable fixture. It contains at all times, between flushes, a large body of water, the surface of which is 10 x 12 inches, and the depth fully 2¼ inches. The outlet is 2 inches in diameter, which dimension is maintained throughout the Siphon Limb, preventing stoppage. Anything which can gain entrance at the outlet will pass readily into the sewer.

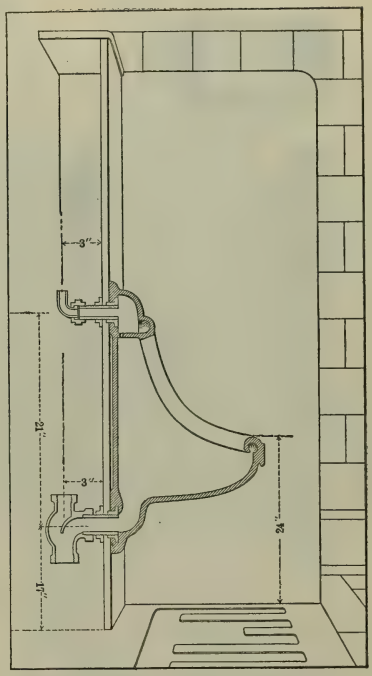
This is the only Siphon Jet Urinal made which operates successfully and maintains at all times a 2¼-inch water seal. After each flush the after-filling replaces the water until the above mentioned depth is attained. This body of water is entirely adequate, forming a seal which is proof against both odors and gases. It is never necessary to resort to disinfecting chemicals where the Clow Urinals are used.

Clow Adamantose is an absolutely non-absorbent, vitreous ware, guaranteed not to craze.

CLOW WASH-DOWN URINALS.



N-5



N-5. SIDE VIEW.

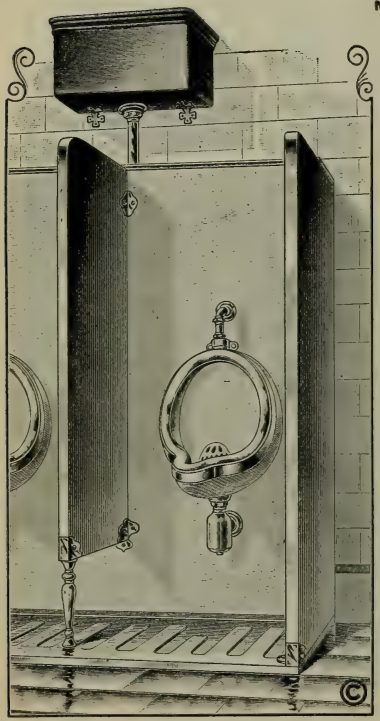
Clow Wash-down Adamantose Lipped Urinal, Automatic Copper Lined Flushing Tank with Regulating Valve, Nickel Plated Brass Tank Supports, and Flush Pipe extending below capping, Brass Inlet and Outlet Connections for Lead or Iron Pipe.

Dimensions of Urinal Stalls: Height, 5 feet; width, center to center, 2 feet; depth, Ends, 2 feet 6 inches; Partitions, 1 foot 8 inches; thickness, Ends, Partitions and Backs, ¾-inch; Base, 1¼ inches.

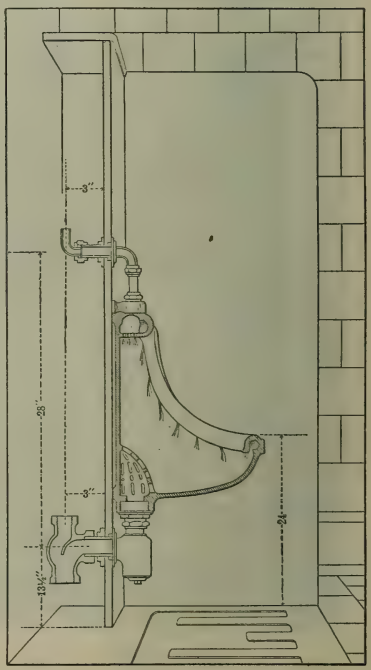
Number of Stalls,	1	2	3	4	5	6	7	8	9	10
Urinals Complete without Stalls	$23.00	$ 36.00	$ 49.00	$ 62.00	$ 75.00	$ 88.00	$101.00	$114.00	$127.00	$140.00
Urinals Complete with Italian Marble Stalls	91.00	146.00	199.00	252.00	305.00	358.00	411.00	464.00	517.00	570.00
Urinals Complete with Tennessee Marble Stalls	78.00	124.00	170.00	216.00	262.00	308.00	354.00	400.00	446.00	492.00
Urinals Complete with Slate Stalls	52.00	85.00	118.00	151.00	184.00	217.00	250.00	283.00	316.00	349.00

CLOW BEEHIVE URINAL.

MADDEN'S PATENT.



N-8.



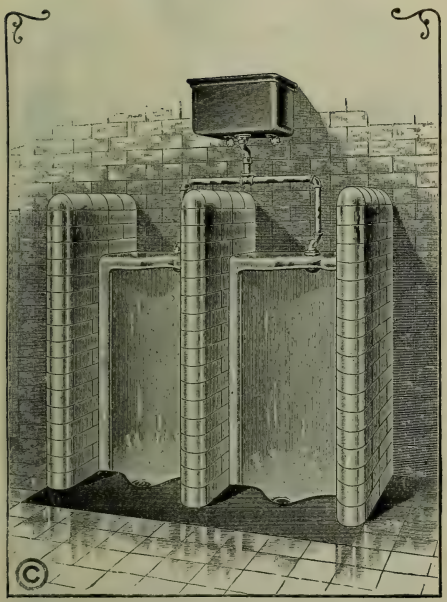
N-8. SIDE VIEW.

Clow Adamantose Lipped Urinal and Beehive Strainer all in one piece. Automatic Copper Lined Flushing Tank with Regulating Valve, Nickel-Plated Brass Tank Supports, Flush Pipe extending below Capping, Inlet Connection and Trap.

Dimensions of Urinal Stalls: Height, 5 feet; width, center to center, 2 feet; depth, Ends, 2 feet; Partitions, 1 foot 8 inches; thickness, Ends, Partitions and Backs, ⅞ inch Base, 1¼ inches.

Number of Stalls,	1	2	3	4	5	6	7	8	9	10
Urinals Complete without Stalls,	$28.00	$ 46.00	$ 64.00	$ 82.00	$ 90.00	$108.00	$126.00	$144.00	$162.00	$180.00
Urinals Complete with Italian Marble Stalls,	96.00	156.00	214.00	272.00	320.00	378.00	436.00	494.00	552.00	610.00
Urinals Complete with Tennessee Marble Stalls,	83.00	134.00	185.00	236.00	277.00	328.00	379.00	420.00	481.00	532.00
Urinals Complete, Slate Stalls,	57.00	95.00	133.00	171.00	199.00	237.00	275.00	313.00	351.00	389.00

CLOW URINAL STALLS.



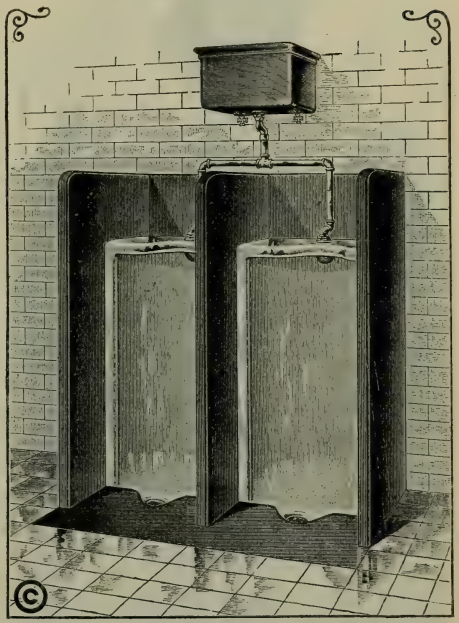
N-11.

American Porcelain Urinals with half-rolled Fronts, N. P. Brass Spray Jet, Brass Waste Plug and Coupling, N. P. Hinged Grating, Automatic Flushing Tank with N. P. Tank Supports and Flush Pipe.

DIMENSIONS—Height of Urinal, 3 feet 7 inches; width from right to left, 2 feet; Outlet Coupling, diameter, 3 inches.

	White.	Buff.
N-11. Two Stalls, complete as described,	$116.00	$96.00
For each additional Urinal, add,	53.00	43.00
For Slate Floor Slabs, add, per Stall,	5.00	

Enameled Brick, white or buff, in sizes and shapes to meet requirements. Prices upon application.



N-14.

American Porcelain Urinals with half-rolled Fronts, N. P. Brass Spray Jet, Brass Waste Plug and Coupling, N. P. Hinged Grating, Automatic Flushing Tank, N. P. Tank Supports and Flush Pipe, Slate Partitions, Backs and Floor Slabs.

DIMENSIONS—Width of Urinal, 2 feet; width from center to center of Partitions, 2 feet 1 inch; height from floor to top of Urinal, 3 feet 6 inches; height to top of Partitions, 5 feet 6 inches; depth of Partition, 1 foot 9 inches; Outlet, diameter, 3 inches; thickness of Partitions and Backs, 1 inch; Floor Slabs, 1½ inches.

	White.	Buff.
N-14. Two Stalls, complete as described,	$146.00	$126.00
For each additional Stall, add,	66.00	56.00
If with marble Partitions, Backs and Floor Slabs, add, for two Stalls,	40.00	
For each additional Marble Stall, add,	27.00	

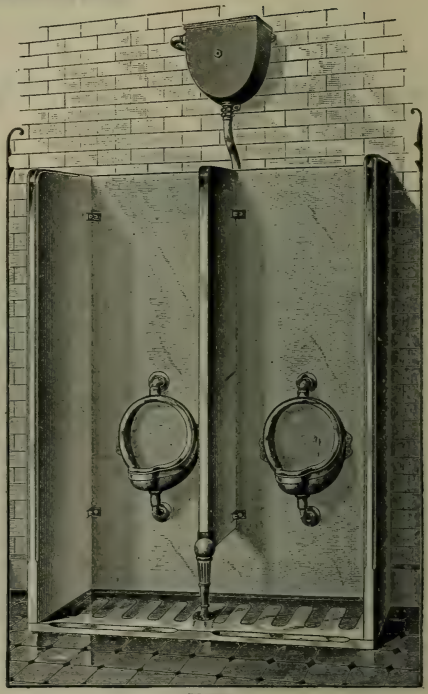
These Urinals can be finished with Pull instead of Automatic Tank. Price, extra, $3.00 per Stall.

CLOW URINAL STALLS.

WITH AUTOMATIC FLUSHING TANKS.



N-16.



N-17

N-16 Clow Adamantose No. 2 Lipped Urinal, Automatic Copper Lined Flushing Tank with Regulating Valve, Nickel-Plated Tank Brackets, Flush and Supply with Loose Key Stop extending below Capping, Nickel-Plated Inlet Connection, Trap and Toggle Bolts with Cap Nuts and Washers.

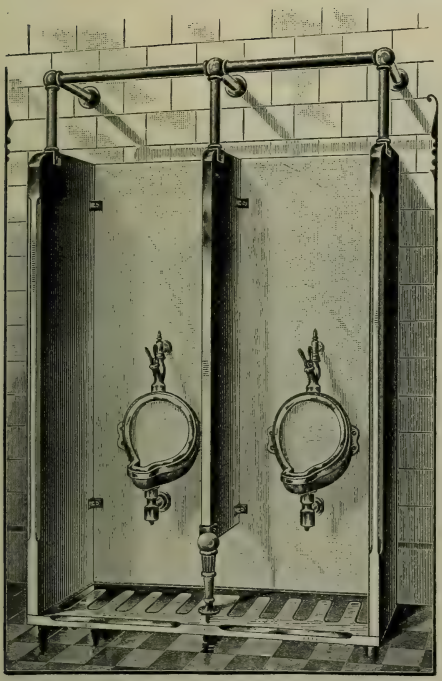
N-17 same as N-16, with Iron Automatic Tilting Tank with Regulating Valve, Nickel-Plated Flush Pipe extending below Marble and Nickel-Plated Inlet and Outlet Connections, Toggle Bolts with Cap Nuts and Washers.

Dimensions of Urinal Stalls: Height, 5 feet; width, center to center, 2 feet; depth, Ends, 2 feet 6 inches; Partitions, 1 foot 8 inches; thickness, Ends, Partitions and Backs, ⅞ inch; Base, 1¼ inches.

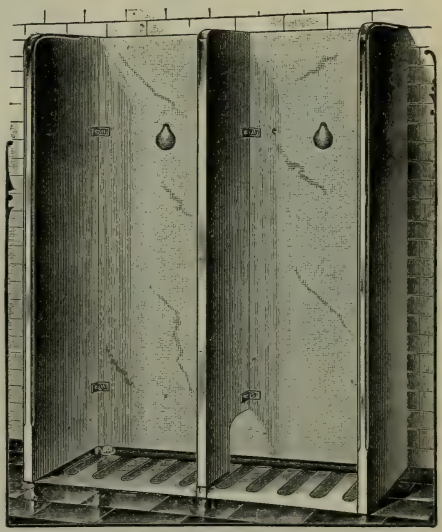
N-16, Number of Stalls,	1	2	3	4	5	6	7	8	9	10
Urinals Complete without Stalls,	$25.00	$ 39.00	$ 53.00	$ 67.00	$ 81.00	$ 95.00	$109.00	$123.00	$137.00	$151.00
Urinals Complete with Italian Marble Stalls,	93.00	149.00	203.00	257.00	311.00	365.00	419.00	473.00	527.00	581.00
Urinals Complete with Tennessee Marble Stalls,	80.00	127.00	174.00	221.00	268.00	315.00	362.00	409.00	456.00	503.00
Urinals Complete, Slate Stalls,	54.00	88.00	112.00	156.00	190.00	224.00	258.00	292.00	326.00	360.00

N-17, Number of Stalls,	1	2	3	4	5	6	7	8	9	10
Urinals Complete without Stalls,	$31.00	$ 45.00	$ 59.00	$ 73.00	$ 87.00	$101.00	$115.00	$129.00	$143.00	$157.00
Urinals Complete with Italian Marble Stalls,	99.00	155.00	209.00	263.00	317.00	371.00	425.00	479.00	533.00	587.00
Urinals Complete with Tennessee Marble Stalls,	86.00	133.00	180.00	227.00	274.00	321.00	368.00	415.00	462.00	509.00
Urinals Complete, Slate Stalls,	60.00	94.00	128.00	162.00	196.00	230.00	264.00	298.00	332.00	366.00

CLOW URINAL STALLS.



N-20.



N-21.

N-20 includes Marble Urinal Stalls, Partition and Ends Polished Both Sides, Back Polished on One Side, 7-inch Capping for space back of Stalls, Base Countersunk and Grooved, Nickel Plated Brass Top Rail, No. 2 Flat Lipped Earthenware Urinals, Nickel Plated Doherty Self-Closing Urinal Cocks and Urinal Traps, Clamps and Bolts, Partition supported on Nickel Plated Brass Leg.

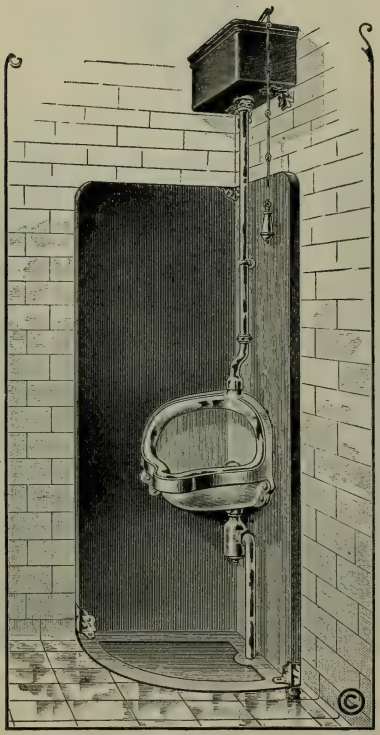
N-21 includes Marble Urinal Stalls, Partition and Ends Polished Both Sides, Back Polished on One Side, Base Countersunk and Grooved, Cast-Iron Galvanized Gutter and Outlet Connection, Brass Perforated Flush Pipe, Lock Key Cock, Clamps and Bolts.

Dimensions of Urinal Stalls: Height, 5 feet; width, center to center, 2 feet; depth, Ends, 2 feet; Partitions, 1 foot 8 inches; thickness, Ends, Partitions, and Backs, ⅞ inch; Base, 1¼ inches.

N-20. Number of Stalls,	1	2	3	4	5	6	7	8	9	10
Italian Marble, complete as shown,	$92.00	$154.00	$214.00	$274.00	$334.00	$394.00	$454.00	$514.00	$574.00	$634.00
Tennessee Marble, complete,	79.00	132.00	185.00	238.00	291.00	344.00	397.00	450.00	503.00	556.00
Slate, complete,	53.00	93.00	133.00	173.00	213.00	253.00	293.00	333.00	373.00	413.00
Deduct, if without Top Railing,	9.00	14.00	19.00	24.00	29.00	34.00	39.00	44.00	49.00	54.00

N-21. Number of Stalls,	1	2	3	4	5	6	7	8	9	10
Italian Marble, complete as shown,	$78.00	$129.00	$178.00	$227.00	$276.00	$325.00	$374.00	$423.00	$472.00	$521.00
Tennessee Marble, complete,	65.00	107.00	149.00	191.00	233.00	275.00	317.00	359.00	401.00	443.00
Slate, complete,	39.00	68.00	97.00	126.00	155.00	184.00	213.00	242.00	291.00	320.00

CLOW URINAL STALLS.



N-23.

Clow Adamantose No. 2 Corner Lipped Urinal, Oak Tank, Chain and Pull, Nickel Plated Tank Supports, Flush Pipe, Inlet and Trap, Toggle Bolts with Cap Nuts and Washers.

Dimensions of Stalls: Height, 5 feet; width of Sides, 24 inches; ⅞-inch thick; Base, 1¼ inches.

Urinal Complete without Stalls	$25.00
Urinal Complete with Italian Marble Stalls	67.00
Urinal Complete with Tennessee Marble Stalls	59.00
Urinals Complete with Slate Stalls	47.00



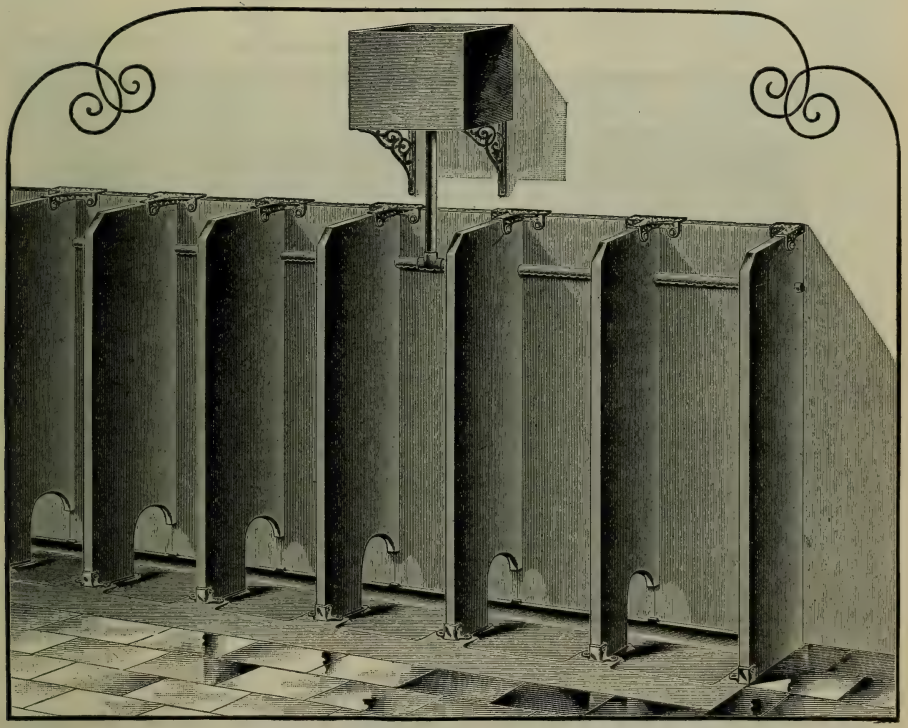
N-25.

Siphon Jet Adamantose Lipped Urinal, with Hard Wood Finished Automatic Flushing Tank, N. P. Tank Supports, N. P. Flush Pipe where exposed and Rough Brass back of Partitions, N. P. Inlet and Outlet Connections, Enameled Slop Sink, 16x20x12 inches, with N. P. Brass Rim, Trap Standard and Vent, Combination Fuller Cock for Hot and Cold Water, Slate Stalls, N. P. Clamps, Angles and Bolts.

Dimensions of Stalls: Height, 5 feet; width, 2 feet; depth, Ends, 3 feet; Partitions, 2 feet; thickness, Ends, Partitions and Back, ⅞-inch; Base 1¼ inches.

Price, Complete $120.00

CLOW SLATE URINAL STALLS FOR SCHOOLS.



N-27.

Slate Urinal Stalls, Galvanized Iron Gutter and Top Clamps, Brass Base Clamps, Automatic Siphon Tank with Galvanized Iron Brackets, Brass Flush and Wash-down Pipes.

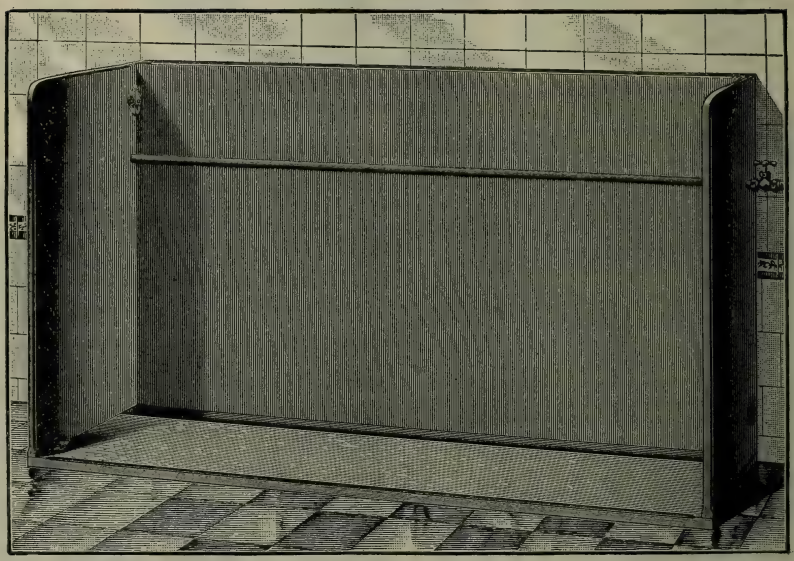
DIMENSIONS AND PRICES.

Height of Stalls, 4½ feet; width of Stalls, center to center of Partitions, 20 inches; depth, 20 inches; width of Base, 26 inches; thickness of Ends, Backs and Partitions, ⅞ inch; Base, 1¼ inches.

Number of Stalls,	2	3	4	5	6	7	8	9	10	11	12
Capacity of Tank, gallons,	1	2	3	3	4	4	6	8	8	8	8
Price, as described,	$48.50	$70.00	$91.50	$112.00	$133.00	$151.00	$176.00	$198.00	$220.00	$241.00	$262.00

CLOW'S SLATE URINAL STALLS.

FOR SCHOOLS AND PUBLIC BUILDINGS.



N-29.

Slate Urinal Stall with Galvanized Iron Gutter, Strainer, Waste Connection, Perforated Brass Wash Down Pipe, Loose Key Stop, Clamps and Bolts.

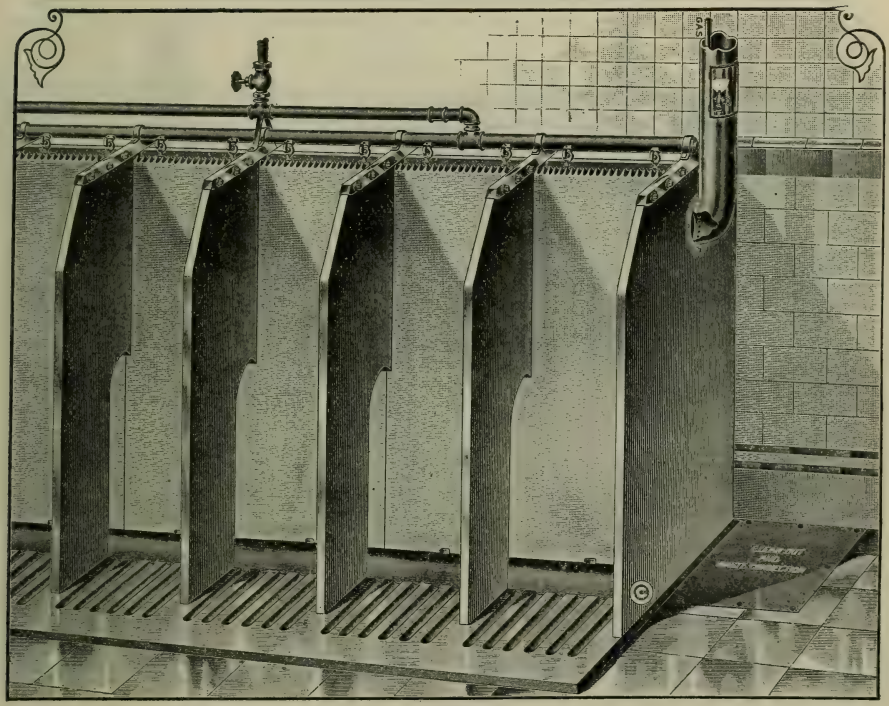
DIMENSIONS.—Height, 4 feet 6 inches; depth, 20 inches; thickness of back and ends, 1 inch; base, 1¼ inches.

LENGTH	4 feet.	6 feet.	8 feet.	10 feet.	12 feet.
PRICE	38.00	55.00	69.00	88.00	100.00

This Stall can be furnished in any length, Single as shown, to go against the wall; or Double with Back in center and Stall on each side.

CLOW VENTILATED URINALS.

FOR SCHOOLS AND OTHER PUBLIC BUILDINGS.



N-30.

Clow Ventilated Slate Urinal with Partitions, Back serrated at top and supported by Brass Hangers, Base countersunk and grooved; Slate Tanks, Enameled Iron Gutter, Extension with Slate Cover, Finished Brass Standing Waste and End Overflow, Finished Brass Combination Partition Braces and Pipe Holders, 1¼-inch Galvanized Iron Supply Pipes with Finished Brass Cocks having Hexagon Heads, 1¼-inch Main Supply Valve and Copper Flue with Gas Burner, Deflector and Collar.

DIMENSIONS OF STALLS.—Height, 5 feet; width, 22 inches center to center; depth, Ends, 1 foot 8⅝ inches; Partitions, 1 foot 2 inches; thickness, Ends and Partitions, 1 inch; Back, 1 inch; Base, 2 inches; width of Base, 1 foot 3 inches; distance from front of Base to wall, 2 feet 4⅝ inches; depth of Trough, 6 inches; diameter of Standing Waste, 2 inches; End Overflow, 1½ inches.

Number of Stalls,	3	4	5	6	7	8	9	10
Price, complete as described,	$173.00	$211.00	$249.00	$287.00	$325.00	$363.00	$401.00	$439.00

The Clow Ventilated Urinal was designed by one of the greatest sanitary engineers of the age, and meets every demand for perfect sanitation. It is cleansed by running water, is perfectly ventilated, and entirely devoid of complicated underground constructions.

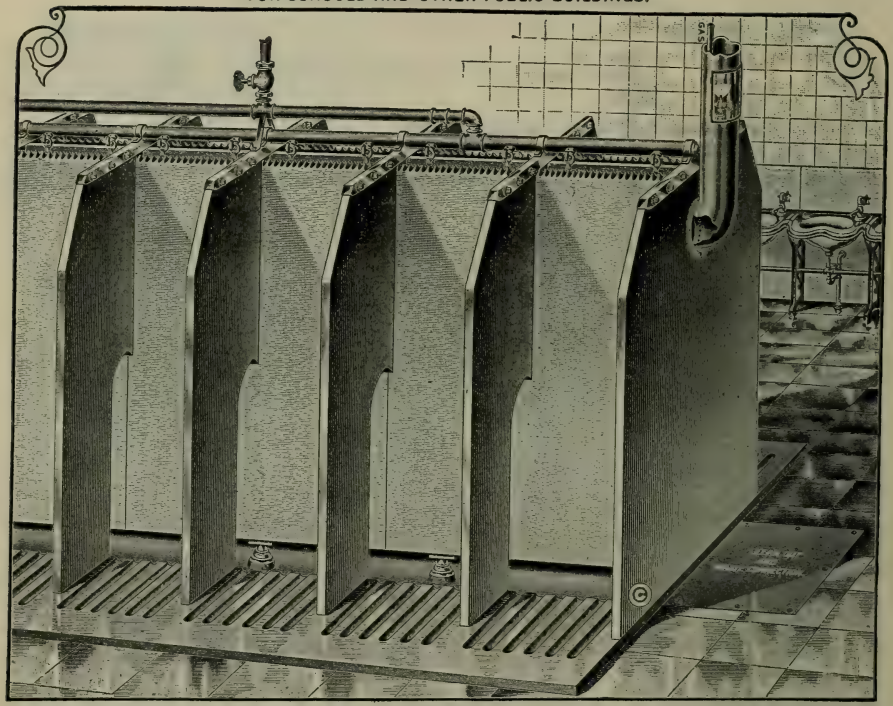
The water is contained in Tanks located behind the Back, at the top. These Tanks, fed from open Cocks, overflow through the serrations along the upper edge of the Back Slab, allowing the water to flow down the front, thoroughly washing the entire surface.

The Back is supported above a Gutter having Wastes and Strainers standing 4 inches high. This insures a body of constantly changed water 2 inches deep, in the Gutter. This quantity of water is, in itself, a deodorant, but the Urinal is completely ventilated by a perfectly efficient and very simple system. The Back, which is suspended above the surface of the water in the Gutter, is also 5½ inches from the wall. Behind it, at the top, are the Tanks, underneath which is a large ventilating space from which opens a Vent Flue.

A strong and constant draft is created by connecting this Flue with a warm air flue or chimney. Where the latter is not available, or when there is no fire to create the current, the draft may be created artificially by a single gas jet, placed in the Flue. Only a small flame is necessary to create a strong draft. All odors are thus drawn from the Gutter up, behind the Back, and out into the Flue, effectively ventilating not only the Urinal, but the entire room in which it is located. The Overflows from the Gutter are trapped separately into an extension or cleanout at the end of the Stalls. The Floor Slabs are grooved and drain into the Gutter.

CLOW DOUBLE VENTILATED URINALS.

FOR SCHOOLS AND OTHER PUBLIC BUILDINGS.



N-31.

Clow Double Ventilated Slate Urinal with Partitions, Backs serrated at top and supported on Galvanized Iron Standards, Bases countersunk and grooved; Slate Tanks, deeply countersunk Slate Gutter, Extension with Slate Cover, two Finished Brass Standing Wastes, Finished Brass Combination Partition Braces and Pipe Holders, 2-inch Galvanized Iron Supply Pipes with Finished Brass Cocks having Hexagon Heads, 2-inch Main Supply Valve and Copper Flue with Gas Burner, Deflector and Collar.

DIMENSIONS OF STALLS.—Height, 5 feet: width, 22 inches center to center: depth, Ends, 2 feet 10 inches; Partitions, 1 foot 2 inches: thickness, Ends and Partitions, -inch; Back, 1 inch; Bases, 2 inches: width of Bases, 1 foot 3 inches: width of Trough, 2 feet: width over all, 4 feet 2 inches: depth of Trough, 4 inches: diameter of Standing Wastes, 2 inches.

Number of Double Stalls,	3	4	5	6	7	8	9	10
Price, complete as described,	$254.00	$318.00	$382.00	$448.00	$512.00	$576.00	$640.00	$704.00

The Clow Ventilated Urinal was designed by one of the greatest sanitary engineers of the age and meets every demand for perfect sanitation. It is cleansed by running water, is perfectly ventilated and entirely devoid of complicated underground constructions.

The water is contained in Tanks located behind the Backs, at the top. These Tanks, fed from open Cocks, overflow through the serrations along the upper edges of the Back Slabs, allowing the water to flow down the front, thoroughly washing the entire surface.

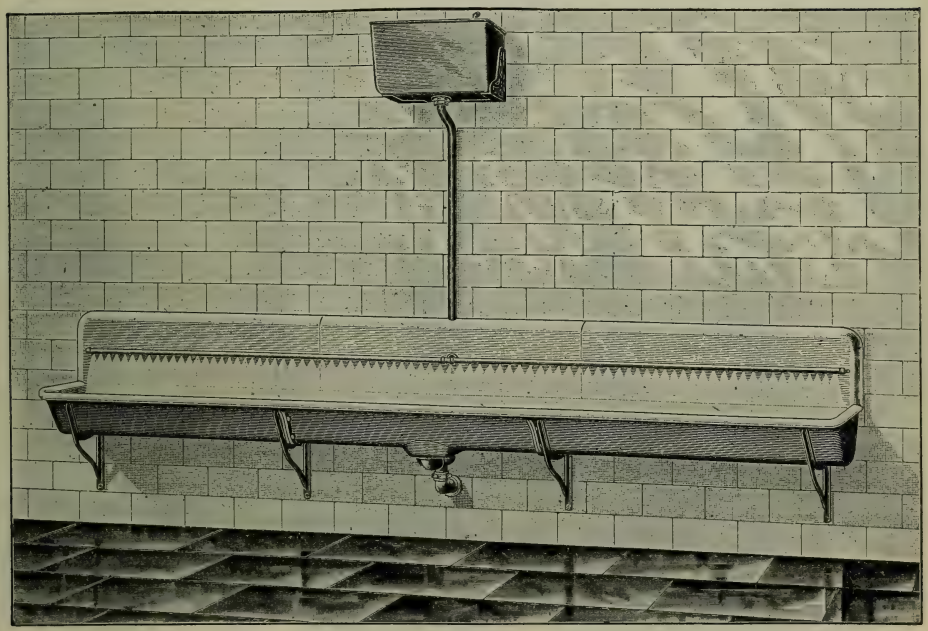
The Backs are supported above a Gutter having Wastes and Strainers standing 4 inches high. This insures a body of constantly changed water 2 inches deep, in the Gutter. This quantity of water is, in itself, a deodorant, but the Urinal is completely ventilated by a perfectly efficient and very simple system. The Backs, which are suspended above the surface of the water in the Gutter, are also 5½ inches apart. Between them at the top are the Tanks, underneath which is a large ventilating space from which opens a Vent Flue.

A strong and constant draft is created by connecting this Flue with a warm air flue or chimney Where the latter is not available, or when there is no fire to create a current, the draft may be created artificially by a single Gas Jet, placed in the Flue. Only a small flame is necessary to create a strong draft. All odors are thus drawn from the Gutter up, behind the backs, and out into the Flue, effectively ventilating not only the Urinal, but the entire room in which it is located. The Overflows from the Gutter are trapped separately into an extension or cleanout at the end of the Stalls. The Floor Slabs are grooved and drain into the Gutter.

CLOW'S AUTOMATIC SIPHON URINAL,

FOR SCHOOLS, FACTORIES AND DEPOTS.

(MADDEN'S PATENT.)



N-34.

Enameled Iron Urinal with Enameled Back, Painted Iron Brackets, Iron Automatic Flushing Tank, Brass Flush and Perforated Washdown Pipes and 2-inch Brass Waste Connection.

DIMENSIONS—Width, 9½ inches; depth, 7½ inches; height to top of urinal, 24 inches; height to top of back, 33¾ inches.

LENGTH . . . . . FEET	4	6	8	10	12	15
SIZE OF TANK . . . . . INCHES	17x8x10	17x8x10	18x10x10	21x10x14	21x10x14	--------
PRICE	70.00	90.00	110.00	130.00	150.00	180.00

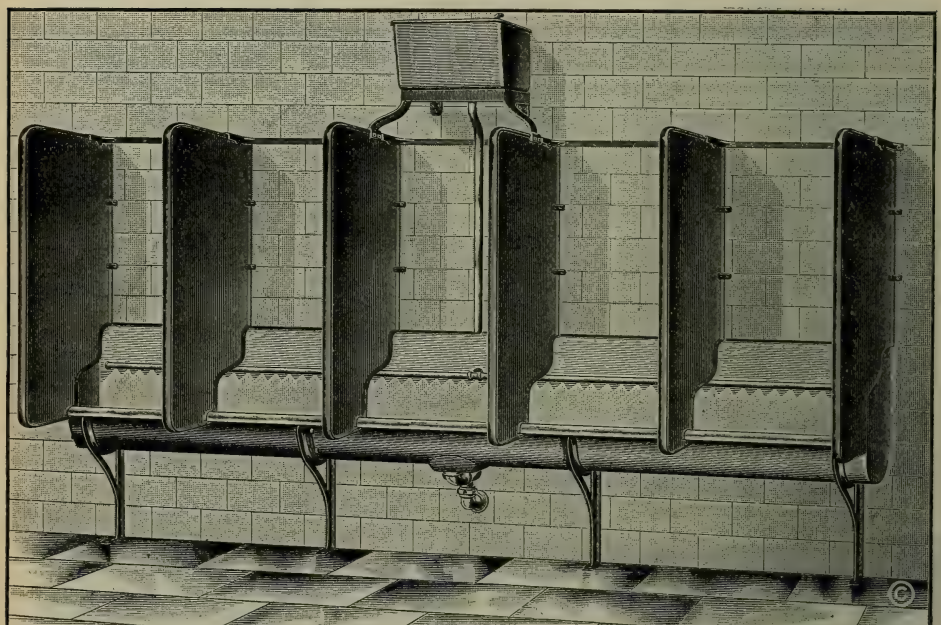
A thoroughly sanitary urinal trough, especially adapted for Schools, Factories and other Public Buildings. The flush is automatic and can be regulated to operate at any desired interval. At each flush the entire contents of the trough is discharged and every part thoroughly cleansed. Between flushes the trough contains a body of water 3 inches deep, thus preventing the odor common to urinals exposing a dry surface.

The outlet is so constructed that the trough can be set at any required height—a desirable feature not possessed by other makes.

CLOW AUTOMATIC SIPHON URINAL.

FOR SCHOOLS, FACTORIES AND DEPOTS.

MADDEN'S PATENT.



N-35.

Enameled Iron Urinal with Enameled Back, Painted Iron Partitions and Brackets, Iron Automatic Flushing Tank, Brass Flush and Perforated Wash-down Pipes and 2-inch Brass Waste Connection.

DIMENSIONS—Width, 9½ inches; depth, 7½ inches; height to top of Urinal, 24 inches; height to top of Back, 33½ inches; height of Partitions, 46 inches; depth of Partitions, 18 inches.

LENGTH . . . . . FEET	4	6	8	10	12	14	16
PRICE	85.00	110.00	135.00	160.00	185.00	210.00	235.00

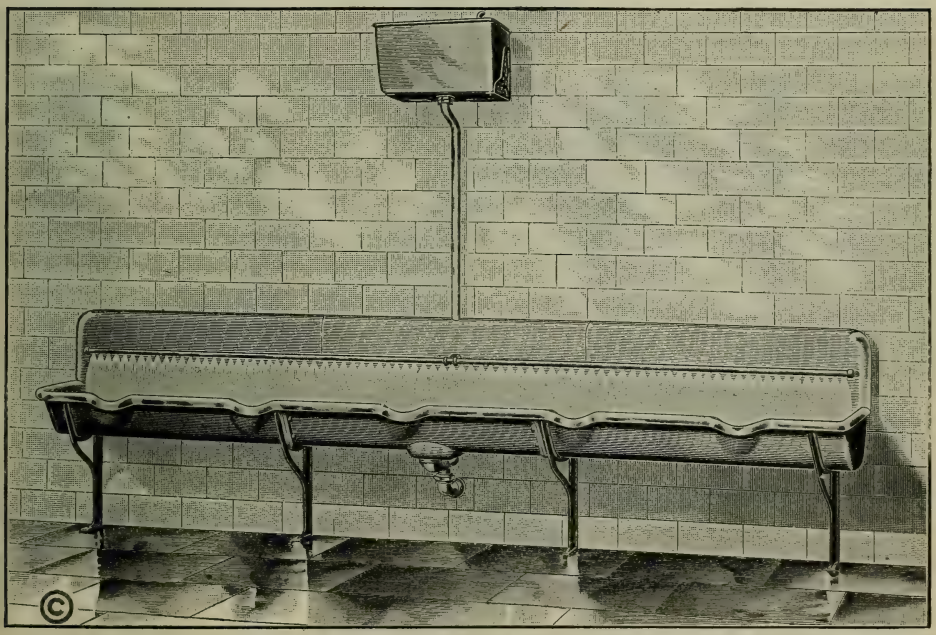
A thoroughly sanitary urinal trough, especially adapted for Schools, Factories and other Public Buildings. The flush is automatic and can be regulated to operate at any desired interval. At each flush the entire contents of the trough is discharged and every part thoroughly cleansed. Between flushes the trough contains a body of water 3 inches deep, thus preventing the odor common to urinals exposing a dry surface.

The outlet is so constructed that the trough can be set at any required height—a desirable feature not possessed by other makes.

CLOW AUTOMATIC SIPHON LIPPED URINAL,

FOR SCHOOLS, FACTORIES AND DEPOTS.

MADDEN'S PATENT.



N-36.

Enameled Iron Lipped Urinal with Enameled Back, Painted Iron Brackets, Iron Automatic Flushing Tank, Brass Flush and Perforated Wash-down Pipes and 2-inch Brass Waste Connection.

DIMENSIONS—Width, 9½ inches; depth, 7½ inches; height to top of Urinal, 24 inches; height to top of back, 33½ inches.

LENGTH . . . . . FEET	4	6	8	10	12	14	16
PRICE	76.00	99.00	122.00	145.00	168.00	191.00	214.00

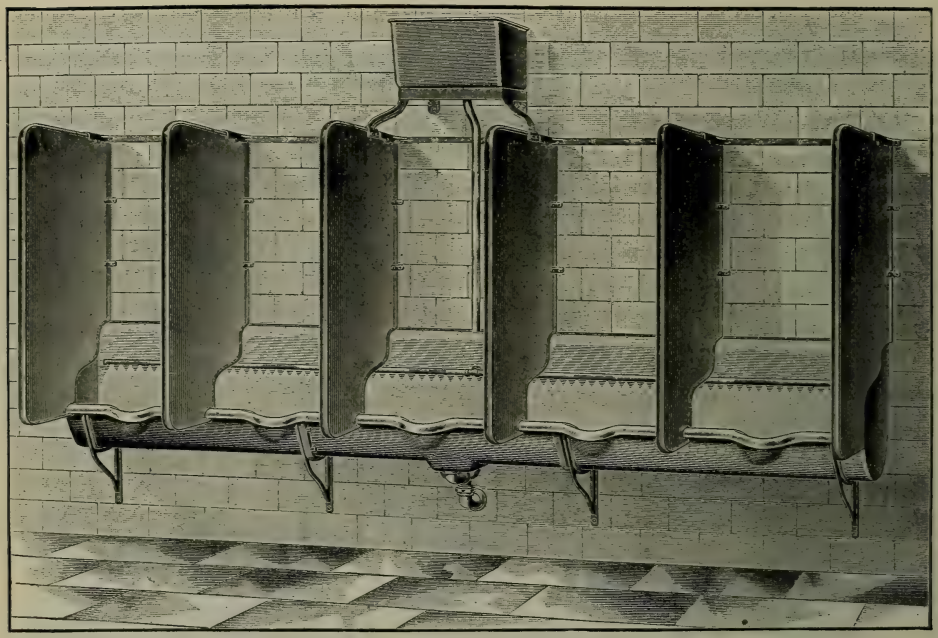
A thoroughly sanitary urinal trough, especially adapted for Schools, Factories and other Public Buildings. The flush is automatic and can be regulated to operate at any desired interval. At each flush the entire contents of the trough is discharged and every part thoroughly cleansed. Between flushes the trough contains a body of water 3 inches deep, thus preventing the odor common to urinals exposing a dry surface.

The outlet is so constructed that the trough can be set at any required height—a desirable feature not possessed by other makes.

CLOW AUTOMATIC SIPHON LIPPED URINAL.

FOR SCHOOLS, FACTORIES AND DEPOTS.

MADDEN'S PATENT.



N-37.

Enameled Iron Lipped Urinal with Enameled Back, Painted Iron Partitions and Brackets, Iron Automatic Flushing Tank, Brass Flush and Perforated Wash-down Pipes, 2-inch Brass Waste Connection.

DIMENSIONS—Width, 9½ inches; depth, 7¼ inches; height to top of Urinal, 24 inches; height to top of Back, 33½ inches; depth of Partitions, 18 inches; height of Partitions, 46 inches.

LENGTH . . . . . FEET	4	6	8	10	12	14	16
PRICE	91.00	119.00	147.00	175.00	203.00	231.00	259.00

If with Partitions galvanized, add for each Partition, $3.00.

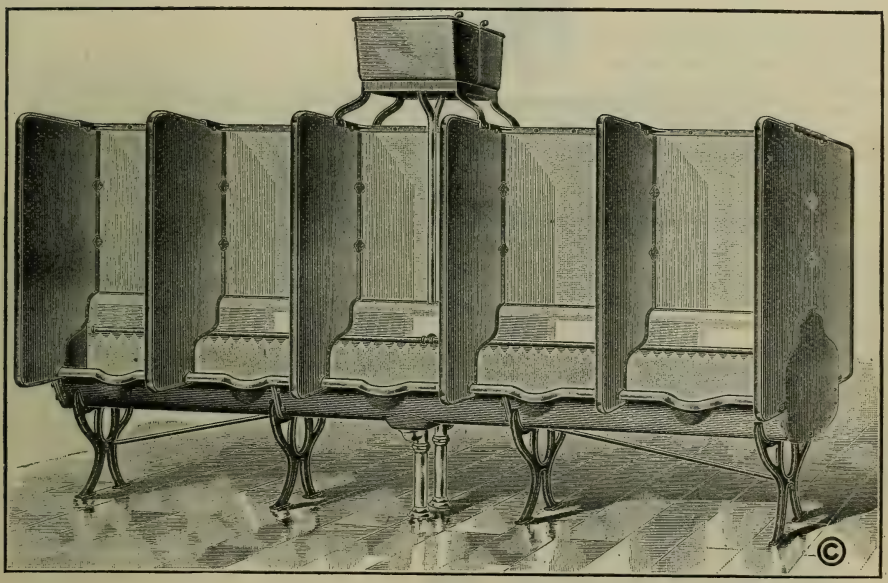
A thoroughly sanitary Urinal Trough, especially adapted for Schools, Factories and other Public Buildings. The Flush is automatic and can be regulated to operate at any desired interval. At each flush the entire contents of the Trough is discharged and every part thoroughly cleansed. Between flushes the Trough contains a body of water 3 inches deep, thus preventing the odor common to urinals exposing a dry surface.

The Outlet is so constructed that the Trough can be set at any required height—a desirable feature not possessed by other makes.

CLOW AUTOMATIC SIPHON LIPPED DOUBLE URINAL.

FOR SCHOOLS, FACTORIES AND DEPOTS.

MADDEN'S PATENT.



N-38.

Enameled Iron Lipped Double Urinal with Enameled Back, Painted Iron Partition and Brackets, Iron Automatic Flushing Tank, Brass Flush and Perforated Wash-down Pipes and 2-inch Brass Waste Connection.

DIMENSIONS—Width, 9½ inches; depth, 7½ inches; height to top of Lip, 24 inches; height to top of Back, 5 feet 8 inches; depth of Partitions, 18 inches; height of Partitions, 46 inches; width over all, 36 inches.

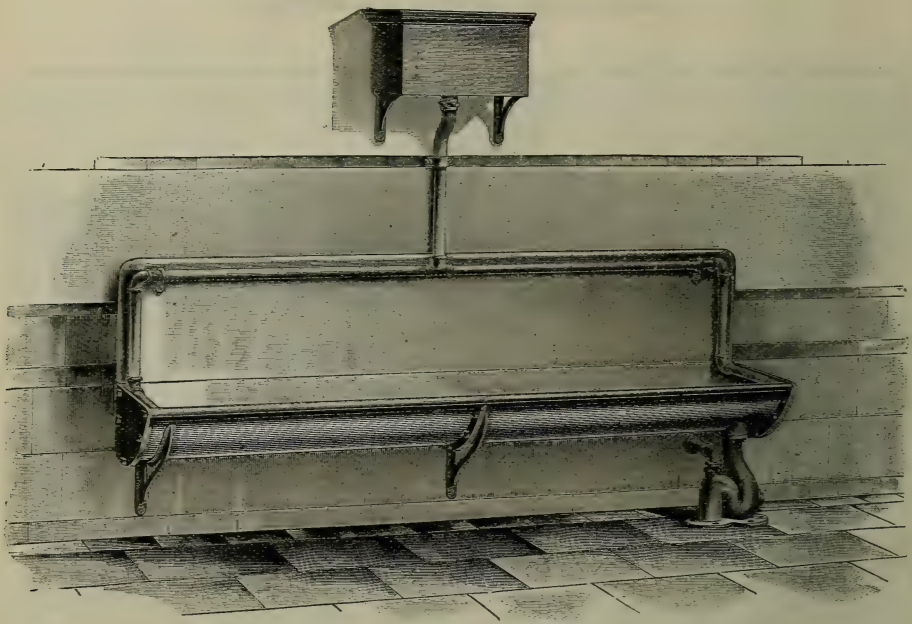
LENGTH . . . . . FEET	4	6	8	10	12	14	16
PRICE	170.00	225.00	280.00	335.00	390.00	445.00	500.00

If with Partitions galvanized, add for each Partition, $3.00.
If with Backs galvanized, add for each Back, $3.50.

A thoroughly sanitary Urinal Trough, especially adapted for Schools, Factories and other Public Buildings. The Flush is automatic and can be regulated to operate at any desired interval. At each flush the entire contents of the Trough is discharged and every part thoroughly cleansed. Between flushes the Trough contains a body of water 3 inches deep, thus preventing the odor common to urinals exposing a dry surface.

The Outlet is so constructed that the Trough can be set at any required height—a desirable feature not possessed by other makes.

CLOW SECTIONAL AUTOMATIC FLUSHING URINALS.



N-39.

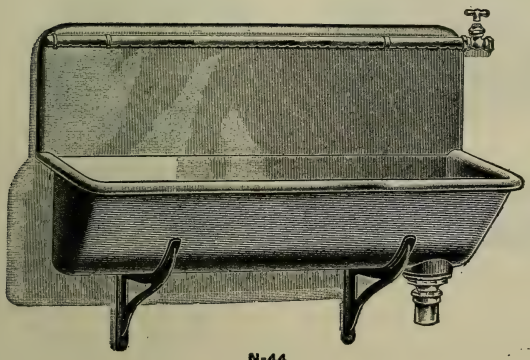
Includes Iron Urinal with Brass Capping in Front, Back and Brackets, Vented Trap, Oak or Cherry Automatic Flushing Tank and Perforated Washdown Pipes.

DIMENSIONS—Height, from floor in front, 26 inches; back, 36 inches; depth inside, 7½ inches; width inside, 9 inches: width, front to back, 12 inches.

	Enameled, with Brass Flush Pipes.	Enameled, with Galvanized Flush Pipes.	Painted, with Galvanized Flush Pipes.
5 feet long, complete as described, with 3-gallon Tank,	$71.00	$58.00	$39.00
6 feet long, " " " " 3-gallon Tank,	81.00	66.00	45.00
7 feet long, " " " " 4-gallon Tank,	91.00	74.00	51.00
8 feet long, " " " " 4-gallon Tank,	103.00	87.00	57.00
10 feet long, " " " " 5-gallon Tank,	121.00	103.00	65.00
12 feet long, " " " " 5-gallon Tank,	139.00	119.00	73.00
14 feet long, " " " " 8-gallon Tank,	157.00	135.00	81.00
16 feet long, " " " " 8-gallon Tank,	175.00	151.00	89.00
18 feet long, " " " " 10-gallon Tank,	193.00	167.00	97.00
20 feet long, " " " " 10-gallon Tank,	211.00	183.00	105.00

If without Trap, deduct, for painted, $3.00; enameled, $4.25.

CLOW CAST-IRON PUBLIC URINALS.



N-44.

N-44. Cast Iron Roll-rim Urinal and Back with Brass Beehive Strainer, Plug, Coupling and Perforated Flush Pipe with Loose Key Stop.

DIMENSIONS of these Urinals are the same as given below.

SIZES AND PRICES.

Flush Pipe, Urinal, Ft.	In.	Painted.	Galv.	Brass Enam.
*2	0	$ 7.25	$10.25	$15.00
*2	6	8.00	11.25	16.50
*3	0	9.25	13.00	19.00
*3	6	10.50	15.25	22.50
*4	0	12.50	18.00	25.00
*5	0	15.75	26.25	34.00
6	0	19.75	32.25	41.25
7	0	22.65	37.00	47.25
8	0	26.00	42.50	54.50
9	0	29.25	47.00	61.25
10	0	32.50	52.50	68.25
12	0	39.25	63.50	81.75

EXTRA.

Brackets,	Painted.	Galv.	Enam.
Price each,	$0.50	$0.75	$0.75

N-45. Cast Iron Roll-rim Urinal and Back with Brass Beehive Strainer, Plug and Coupling.

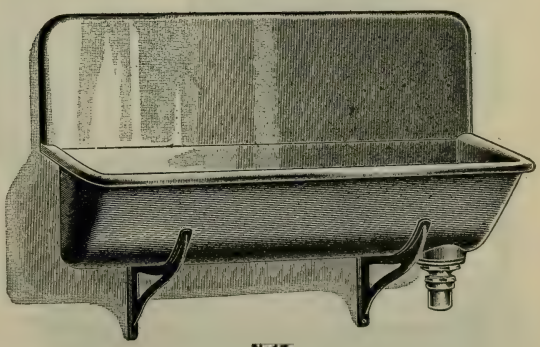
DIMENSIONS—Depth of Urinal, 7¼ inches; front to back inside, 9¼ inches; front to back over all, 12 inches; Back, 10 inches high.

SIZE AND PRICES.

Urinal Length. Ft.	In.	Complete as described. Painted.	Galv.	Enam.
*2	0	$ 5.00	$ 8.00	$12.00
*2	6	5.50	8.75	13.00
*3	0	6.25	10.00	15.00
*3	6	7.25	12.00	18.00
*4	0	8.50	14.00	20.00
*5	0	11.00	21.50	28.00
6	0	14.00	26.50	34.00
7	0	16.00	31.00	39.00
8	0	18.50	35.50	45.00
9	0	20.75	40.00	50.50
10	0	23.00	44.50	56.25
12	0	27.75	53.50	67.50

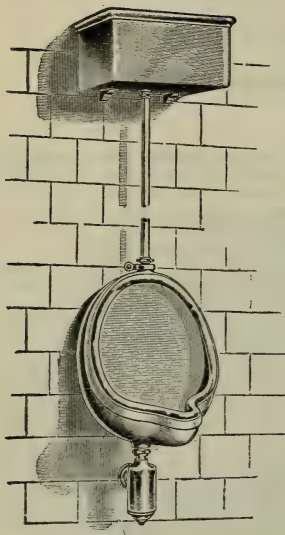
EXTRA.

Brackets,	Painted	Galv.	Enam.
Price each,	$0.50	$0.75	$0.75



N-45.

*Cast in one piece. Urinals over 5 feet in length are made in two or more pieces, and well bolted together. Any Urinal listed can be furnished with Outlet on left hand end, but will invariable be sent on right side, as shown, unless otherwise specified.



N-50.

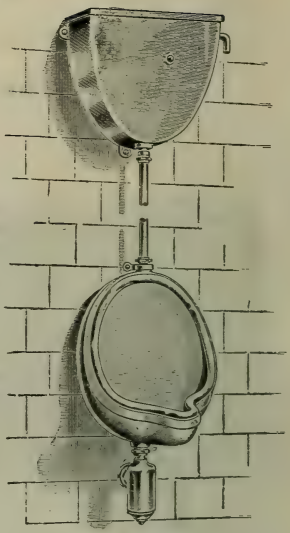
CLOW CAST-IRON PUBLIC URINALS.

N-50. Iron Urinal, Flat Back Lipped, Enameled inside and outside, 12x15 inches, Automatic Iron Tank, Enameled inside and outside, N. P. Flush Pipe and Urinal Trap.

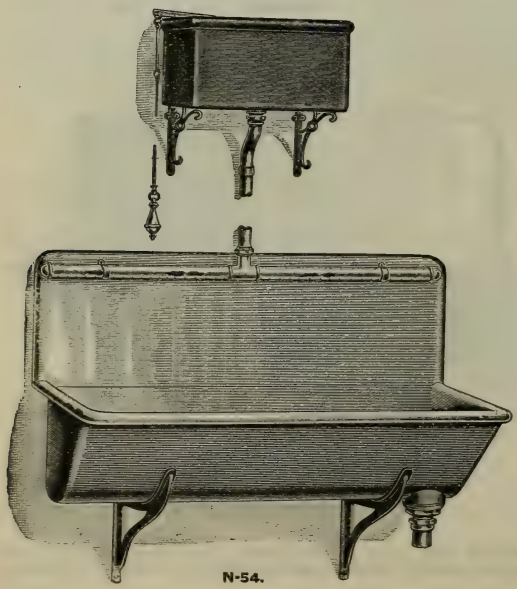
Price, ... $28.00

N 52. Iron Urinal, Flat Back Lipped, Enameled inside and outside, 12x15 inches, with Painted Iron Tilting Tank, N. P. Flush Pipe and Urinal Trap.

Price, ... $29.50



N-52.



N-54.

N-54. Cast Iron Roll-rim Urinal and Back with Brass Beehive Strainer, Plug, Coupling and Tail Piece, Perforated Flush Pipe and Oak Tank with Flush Pipe to Urinal.

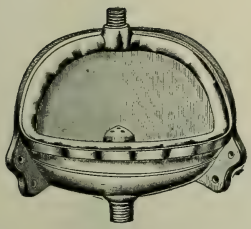
PRICES.

	Painted with Galv. Flush Pipe.	Galvanized with Galv. Flush Pipe.	Enam. with Brass Flush Pipe.
24 inches long,	$13.25	$16.25	$21.00
30 " "	14.00	17.25	22.50
36 " "	15.25	19.00	25.00
42 " "	16.50	21.25	28.50
48 " "	18.50	24.00	31.00
60 " "	21.75	32.25	40.00
72 " "	25.75	38.25	47.25

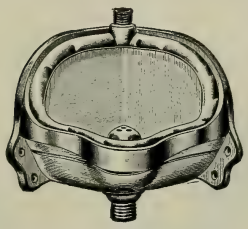
EXTRA.

Brackets.	Painted.	Galv.	Enam.
Price, each,	$0.50	$0.75	$0.75

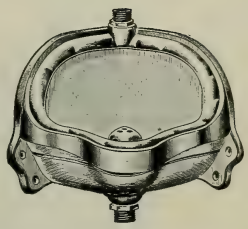
EARTHENWARE URINALS.



N-66.
CORNER URINAL.

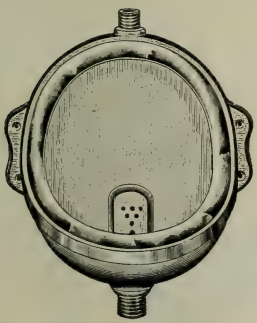


N-67.
CORNER LIPPED URINAL.

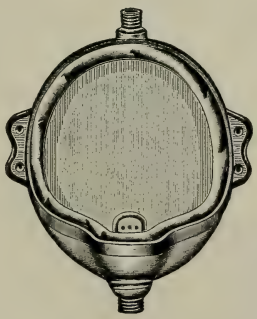


N-71.
CORNER LIPPED URINAL WITH BRASS SPUDS, THREADED FOR IRON PIPE.

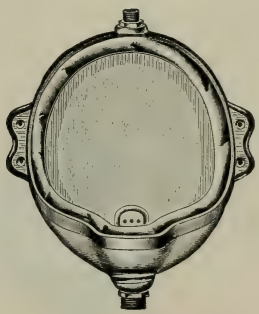
SIZE	1	2	3
SIZE . . . . . INCHES	13 x 13	11½ x 11½	10½ x 10½
N-66 . . . . . EACH	8.00	6.00	5.00
N-67 . . . . . EACH	10.00	8.00	7.00
N-71 . . . . . EACH	11.50	9.50	----



N-73.
FLAT BACK URINAL.



N-75.
FLAT BACK LIPPED URINAL.

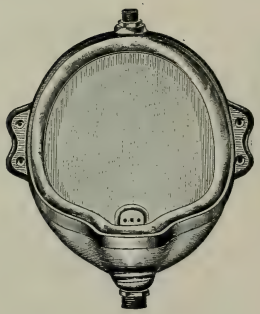


N-77.
FLAT BACK LIPPED URINAL WITH BRASS SPUDS, THREADED FOR IRON PIPE.

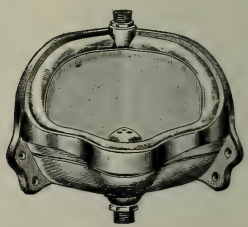
NUMBER	1	2	3
SIZE . . . . . INCHES	15 x 18	13 x 15	12 x 14
N-73 . . . . . EACH	8.00	6.00	5.00
N-75 . . . . . EACH	10.00	8.00	7.00
N-77 . . . . . EACH	11.50	9.50	----

Approximate weight of crate, 650 pounds. Number in crate, 12 No. 1, 24 No. 2, 24 No. 3.
Grinding Urinals, extra, 50c.

IRON URINALS.



N-85.
IRON FLAT BACK LIPPED URINAL.



N-87.
IRON CORNER LIPPED URINAL.

FLAT BACK URINALS.—N-85.

NUMBER		1	2
SIZE	INCHES	15x18	12x15
PAINTED	EACH	6.00	5.00
ENAMELED INSIDE	EACH	11.00	9.00
ENAMELED INSIDE AND OUT	EACH	14.00	12.00

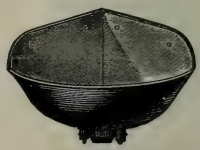
CORNER URINALS.—N-87.

NUMBER		1	2
SIZE	INCHES	12x12	11x11
PAINTED	EACH	6.00	5.00
ENAMELED INSIDE	EACH	11.00	9.00
ENAMELED INSIDE AND OUT	EACH	14.00	12.00

N-85 and N-87 are made same size and are interchangeable with Earthenware Urinals of the same size.



N-90. FLAT BACK URINAL.



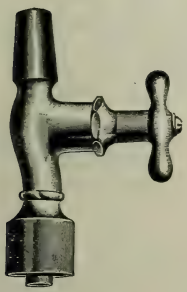
N-92. CORNER URINAL.

NUMBER		1	2
LENGTH OF BACK	INCHES	11	15½
PAINTED	EACH	1.15	1.50
GALVANIZED	EACH	2.00	2.50
ENAMELED	EACH	2.50	3.00

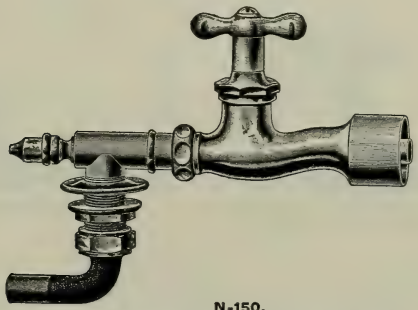
NUMBER		1	2	3
LENGTH OF SIDE	INCHES	8	9½	11
PAINTED	EACH	.90	1.15	1.45
GALVANIZED	EACH	1.20	1.70	2.25
ENAMELED	EACH	1.75	2.25	2.75

Can be furnished Enameled all over.

SELF-CLOSING URINAL COCKS.



N-149. URINAL COCK.

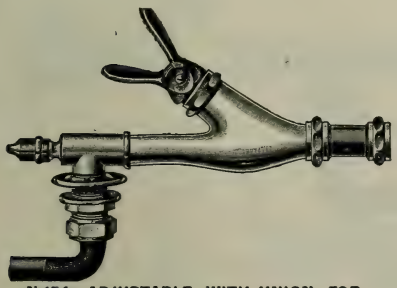


N-150.
WITH UNION AND ADJUSTABLE FLANGE.

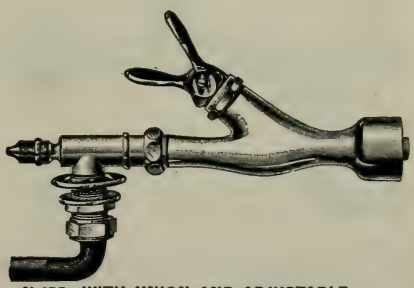
BOSTON SELF-CLOSING URINAL COCKS.

FIGURE		N-149.	N-150.
FINISHED	PER DOZEN	35.00	63.00
NICKEL PLATED	PER DOZEN	41.00	72.00
FOR IRON PIPE, ADD	PER DOZEN	3.00	-----

If with Union Connection for Urinals with brass spuds, as shown in N-154, add to list, per dozen, 5.00.



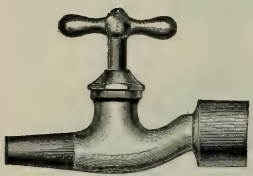
N-154. ADJUSTABLE, WITH UNION, FOR BRASS SPUD URINALS.



N-158. WITH UNION AND ADJUSTABLE FLANGE.

DOHERTY SELF-CLOSING URINAL COCKS.

FIGURE		N-154	N-158
FINISHED	PER DOZEN	68.00	63.00
NICKEL PLATED	PER DOZEN	77.00	72.00



N-170. COMPRESSION URINAL COCK FOR LEAD PIPE.



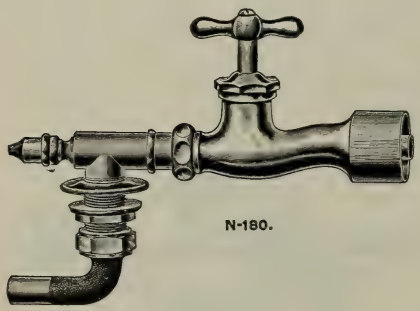
N-173. FULLER URINAL COCK.



N-176. COMPRESSION URINAL COCK FOR IRON PIPE.

FINISH		Polished Brass.	Nickel Plated.
N-170. COMPRESSION	PER DOZEN	18.00	21.00
N-173. FULLER	PER DOZEN	27.00	29.50
N-176. COMPRESSION	PER DOZEN	19.00	22.00

If with Stuffing Box, add to list, per dozen, $2.00. If with Union Connection for Urinals with brass spuds, as shown in N-154, add to list, per dozen, $5.00.



N-180.



N-185. LOOSE KEY.

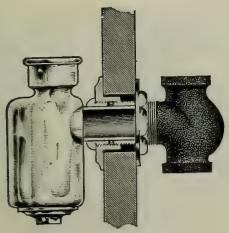
COMPRESSION URINAL COCKS, WITH FLANGE, NUT, AND BENT COUPLING.

ADJUSTABLE FLANGE AND UNION.

FINISH		Polished Brass.	Nickel Plated.
N-180	PER DOZEN	46.00	52.00
N-185	PER DOZEN	52.00	58.00

If with Stuffing Box, add to list, per dozen, $2.00. If with Union Connection for Urinals with brass spuds, as shown in N-154, add to list, per dozen, $5.00.

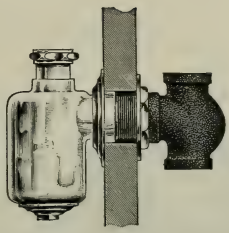
URINAL TRAPS AND CONNECTIONS.



N-195.

Adjustable Urinal Trap with Slip Joint Connection and Vent Fitting.
Polished Brass or Nickel Plated - - - each, $6.50
If without Vent Fitting - - - - - each, 5.00

We make this Trap, also, with connection for Brass Spud Urinals, as shown in N-198, at same price.



N-198.

Adjustable Urinal Trap with Iron Pipe Connection and Vent Fitting.
Polished Brass or Nickel Plated - - - each, $6.50
If without Vent Fitting - - - - - each, 5.00

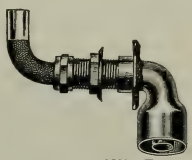
This Trap is designed especially for use with our Brass Spud Urinals, pages 529 and 530.



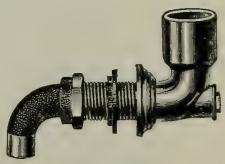
N-205. LEAD PIPE INLET.



N-208. SLIP JOINT INLET.

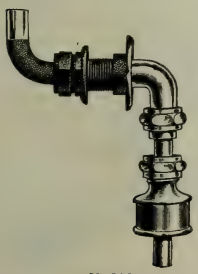


N-211. INLET.

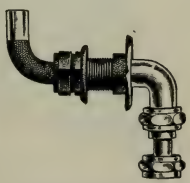


N-214. OUTLET.

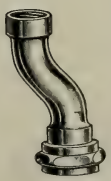
FIGURE	N-205	N-208	N-211	N-214
POLISHED BRASS EACH	.75	.75	1.75	2.60
NICKEL PLATED EACH	1.00	1.00	2.00	2.75



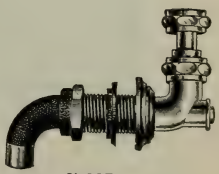
N-218. ADJUSTABLE INLET WITH SLIP JOINT.



N-221. ADJUSTABLE INLET FOR BRASS SPUD URINAL.

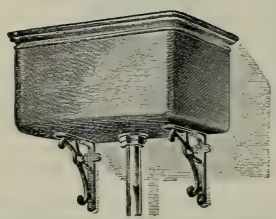


N-224. I. P. INLET FOR BRASS SPUD URINAL.

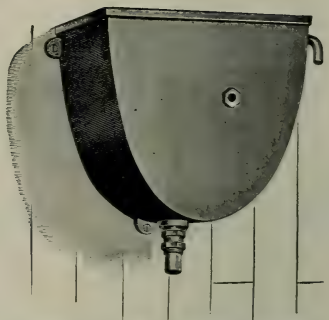


N-227. OUTLET FOR BRASS SPUD URINAL.

FIGURE	N-218	N-221	N-224	N-227
POLISHED BRASS	2.35	2.35	1.75	2.60
NICKEL PLATED	2.50	2.50	2.00	2.75



N-97. ROUND CORNER AUTOMATIC TANK.



N-100. CLOW AUTOMATIC TILTING TANK.

AUTOMATIC TANKS.—N-97.

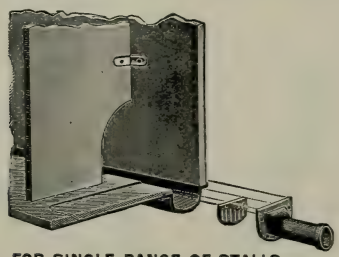
CAPACITY . . . . . GALLONS	1	2	3	4	5	6	8	10
NUMBER OF HOPPERS TANKS WILL FLUSH	----	1	2	3	4	5	6	8
NUMBER OF URINALS TANKS WILL FLUSH	1	2	3	4	5	6	8	12
N-97. OAK OR CHERRY, SINGLE CONNECTION. COMP. . . .	6.25	7.25	8.25	10.25	11.25	12.25	14.25	16.00
PLAIN HARDWOOD TANK, SINGLE CONNECTION. COMP. . . .	5.25	6.25	7.25	8.25	9.25	10.25	11.25	13.00

Add to list, for Plain Brass Double Connections, 50 cents; Triple Connections, $1.00.

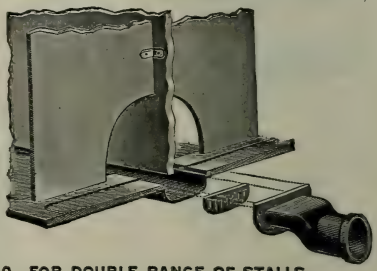
TILTING TANKS.—N-100.

No. 1. 1-gallon Flush Tank, with 1-inch Coupling, for 1 Hopper, or 2 Urinals, ... $15.50
No. 2. 3-gallon Flush Tank, with 1¼-inch Coupling, for 2 or 3 Hoppers, or 3 to 6 Urinals, ... 21.00
No. 3. 5-gallon Flush Tank, with 1½-inch Coupling, for 4 or 5 Hoppers, or 7 to 10 Urinals, ... 26.50
No. 4. 1-gallon Flush Tank, with 1-inch Double Coupling, for 2 Urinals, ... 17.50
No. 5. 3-gallon Flush Tank, with 1¼-inch Double Coupling, for 2 to 3 Hoppers, or 3 to 6 Urinals, . . . 24.50
No. 6. 5-gallon Flush Tank, with 1½-inch Double Coupling, for 4 to 5 Hoppers, or 7 to 10 Urinals, . . . 30.00

Our Automatic Tilting Flushing Tanks are simple in construction, positive in action, and can be regulated to flush as often as needed by simply turning a cock in the Tank to fill tilting bucket in Tank in a given time. They have been used for several years, and give general satisfaction.



N-108. FOR SINGLE RANGE OF STALLS.



N-110. FOR DOUBLE RANGE OF STALLS.

URINAL STALL GUTTERS.

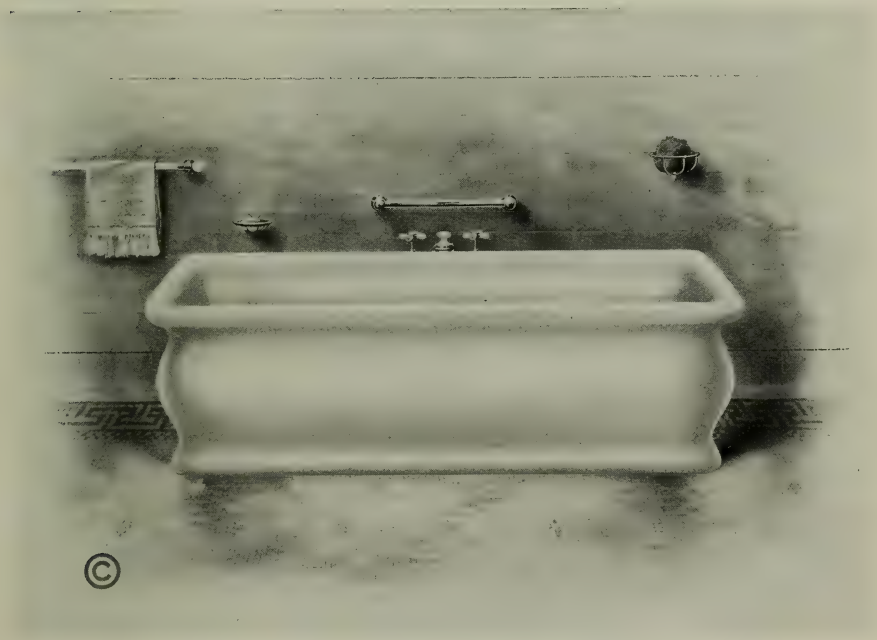
Sections are 5 feet long and 4 inches wide; outlet piece has spigot end for 2-inch soil pipe.
Price, one section with outlet piece and grating, galvanized or enameled, ... $7.25
Price of additional sections, . . . each, 6.25

Sections are 5 feet long and 8 inches wide; outlet piece has spigot end for 4-inch soil pipe.
Price, one section with outlet piece and grating, galvanized or enameled, ... $14.50
Price of additional sections, . . . each, 12.50

Price of section any length under 5 feet to make up special length, same price as full section.

CLOW AMERICAN PORCELAIN BATHS.

WELLS' PATENT.



P-1.

American Porcelain Rolled-rim Greco Bath, with Glazed Vitreous surface inside and over Rims, Decorated Exterior, Porcelain White, N. P. Combination Waste and Bell Supply Fittings with China Handles.

DIMENSIONS AND PRICES.

Size of Tub,		5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	54	61	69½
Width over Rim,	Inches	33	33	33
Width over all,	Inches	39	39	39
Depth inside,	Inches	18½	18½	18½
Height,	Inches	21	21	21
Class A,	Each	$256.00	$268.00	$286.00
Class B,	Each	204.00	212.00	228.00

N. P. Sponge Holder, $2.25. N. P. Soap Dish with removable Porcelain Tray, $2.75.
N. P. Hand Rail, 24 inches long, $5.50.
Porcelain Towel Bar, with N. P. Mountings, 30 inches long, $8.50.

CLOW AMERICAN PORCELAIN BATHS.



P-2.

American Porcelain Rolled Rim Ducal Bath, with glazed vitreous surface inside and over rims, Decorated Exterior, Porcelain White, N. P. Combination Waste and Bell Supply Fittings with China Handles, N. P. Shower, Valves, Curtain Ring, Rubber Curtain, N. P. Chain and Hook.

DIMENSIONS AND PRICES.

Size of Tub,		5 ft.	5½ ft.	6 ft.
Length,	Inches	61	67	73
Length over all,	Inches	65	71	77
Width,	Inches	30	30	30
Depth inside,	Inches	19	19	19
Height,	Inches	21	21	21
Class A,	Each	$274.00	$285.00	$308.00
Class B,	Each	224.00	232.00	248.00

N. P. Hand Rail, 24 inches long, $5.50.

Porcelain Towel Bar with N. P. Mountings, 30 inches long, $8.50.

CLOW AMERICAN PORCELAIN BATHS.



P-3.

American Porcelain Rolled Rim Bath, Roman Pattern, with glazed vitreous surface inside and over rims, Decorated Exterior Porcelain White, N. P. Combination Waste and Bell Supply Fittings with China Name Plates.

DIMENSIONS AND PRICES.

Size of Tub,		4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	56	62	68	74
Width over Rim,	Inches	33¾	33¾	33¾	33¾
Width over all,	Inches	38	38	38	38
Depth inside,	Inches	19	19	19	19
Height,	Inches	22¼	22¼	21¼	21¼
Class A,	Each	$214.00	$227.00	$247.00	$273.00
Class B,	Each	172.00	182.00	196.00	215.00
Class C,	Each	137.00	143.00	153.00	166.00

If without exterior finish, deduct $20.00.

N. P. Sponge Holder, $2.25. N. P. Towel Basket, $7.00.
N. P. Soap Dish with removable Porcelain Tray, $2.75.
Glass Towel Bar with N. P. Mountings and Cut Glass Ends, 30 inches long, $7.50

CLOW AMERICAN PORCELAIN BATHS.



P-4.

American Porcelain Rolled Rim Bath, French Pattern, with glazed vitreous surface inside and over rims, Decorated Exterior, Porcelain White N. P. Combination Waste and Bell Supply Fittings with China Handles.

DIMENSIONS AND PRICES.

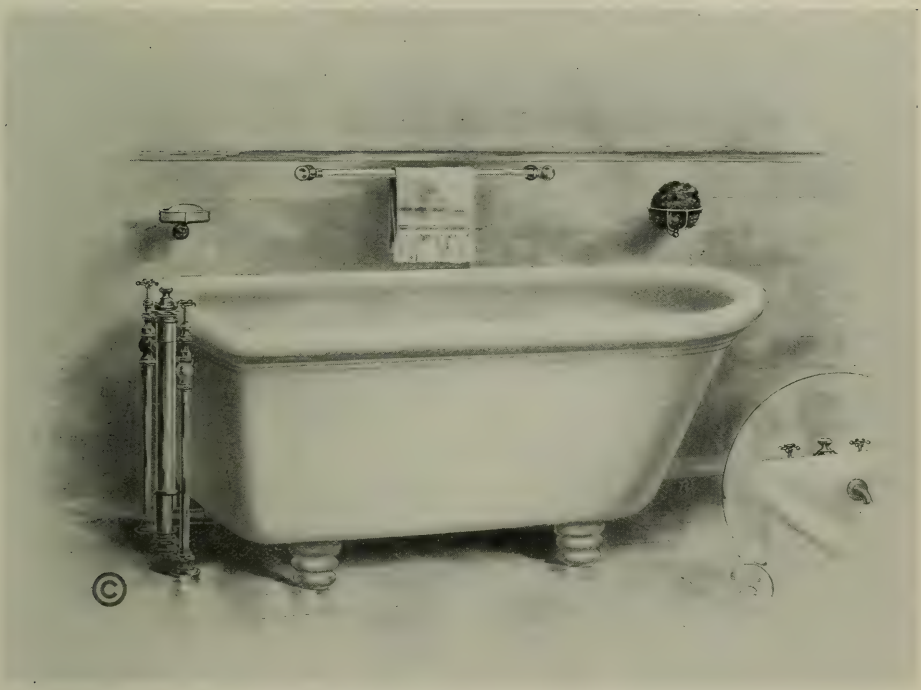
Size of Tub,		4½ ft.	5 ft.	5½ ft.	6 ft.
Length over all,	Inches	58	64	70	76
Width over Rim,	Inches	33½	33½	33½	33½
Depth inside,	Inches	18½	18½	18½	18½
Height,	Inches	21¼	21¼	21¼	21¼
Class A,	Each	$201.00	$214.00	$277.00	$253.00
Class B,	Each	163.00	172.00	182.00	200.00
Class C,	Each	131.00	137.00	143.00	156.00

If without exterior finish, deduct $20.00.

TRIMMINGS.

N. P. Sponge Holder, $2.25.
N. P. Soap Dish with removable Porcelain Tray, $2.75.
Glass Towel Bar with N. P. Mountings and hand polished Glass ends, 30 inches long, $7.00.

CLOW AMERICAN PORCELAIN BATHS.



P-5.

American Porcelain Rolled Rim Bath, French Pattern, with glazed vitreous surface inside and over rim, Decorated Exterior, Porcelain White, glazed Porcelain Legs, N. P. Ideal Waste, Nozzle and Supply Fittings with China Name Plates.

DIMENSIONS AND PRICES.

Size of Tub,		4½ ft.	5 ft.	5½ ft.	6 ft.
Length over all,	Inches	58	64	70	76
Width over Rim,	Inches	29	29	30	30
Depth inside,	Inches	19	19	19	19
Height on Legs,	Inches	25	25	25	25
Class A,	Each	$182.00	$194.00	$207.00	$217.00
Class B,	Each	146.00	155.00	164.00	181.00
Class C,	Each	122.00	128.00	135.00	147.00

If without exterior finish, deduct $20.00.

Nickel Plated Sponge Holder, $2.25.
Nickel Plated Soap Dish with China Removable Tray, $2.75.
Glass Towel Bar with N. P. Mountings and hand polished Glass ends, 30 inches long, $7.00.

CLOW AMERICAN PORCELAIN BATHS.



P-6.

American Porcelain Rolled Rim Bath. French Pattern, with glazed vitreous surface inside and over rim, Decorated Exterior, Porcelain White, glazed Porcelain Legs, Clow Special No. 5 Double Bath Cock with Soap Dish and China Removable Tray, Supplies and Ideal Waste with China Name Plate.

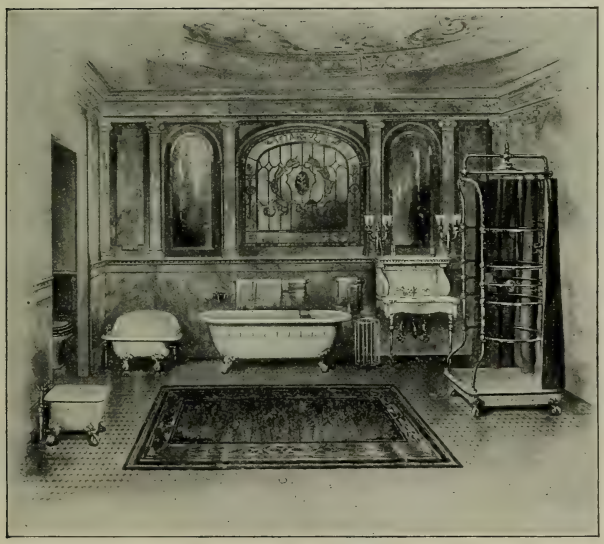
DIMENSIONS AND PRICES.

Size of Tub,		4½ ft.	5 ft.	5½ ft.	6 ft.
Length over all,	Inches	58	64	70	76
Width over Rim,	Inches	29	29	30	30
Depth inside,	Inches	19	19	19	19
Height on Legs,	Inches	25	25	25	25
Class A,		$178.00	$198.00	$200.00	$226.00
Class B,		142.00	150.00	159.00	190.00
Class C,		118.00	122.00	130.00	143.00

TRIMMINGS.

Nickel Plated Sponge Holder. $2.25.
Nickel Plated Towel Basket, $7.00.
Glass Towel Bar with N. P. Mountings, 30 inches long, $7.00.

BATH ROOM INTERIORS.



BATH ROOM DESIGN A.

Approximate Cost of Fixtures, ... $1,008.00

BATH, Porcelain Enameled, with 4½-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings, Exterior Finished Ivory White and Empire Border, P-13, (5-foot size), ... $ 91.25

SHOWER BATH AND RECEPTOR, Nickel Plated Combination Shower and Needle Bath, with Liver Sprays, Thermometer and Rubber Curtain. Porcelain Enameled Receptor, Exterior Finished Ivory White and Empire Border, ... 256.00

SITZ BATH, Porcelain Enameled, with 3-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings, with Liver Spray and Bidet, Exterior Finished Ivory White and Empire Border, P-105, ... 111.50

FOOT BATH, Porcelain Enameled, with 3-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings, Exterior Finished Ivory White and Empire Border, ... 51.50

LAVATORY, Mexican Onyx, with Scroll Pillars and Shelf, Decorated Vitro-porcelain Basin, Nickel Plated Offset Legs, Combination Supply and Waste Fittings, with Onyx Handles, ... 400.00

WATER CLOSET, Adamantose Oval Siphon Jet, Decorated Bowl, Mahogany Tank with Onyx Top, Mahogany Seat and Cover, Nickel Plated Hinges, Supply Pipe with Stop, M-110, ... 67.00

MISCELLANEOUS TRIMMINGS.

Bath Soap Dish, T-223, ... 2.50
Towel Arms, T-202, ... 3.75
Bath Bar, 30-inch, T-191, ... 3.75
Towel Basket, T-285, ... 13.50
Sponge Holder, T-252, ... 2.25
Paper Holder, T-311, ... 5.00

BATH ROOM INTERIORS.



BATH ROOM DESIGN C.

Approximate Cost of Fixtures $376.00

BATH, Porcelain Enameled, 3-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings. P-59 Bath (5-foot), complete with Exterior Finish and Gold Bands, ... $ 60.00

SHOWER, Nickel Plated Shower with Rubber Curtain and Shampoo Attachment complete, ... 43.00

SITZ BATH, Porcelain Enameled, 3-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings. Complete with Exterior Finish and Gold Bands, P-106, ... 54.50

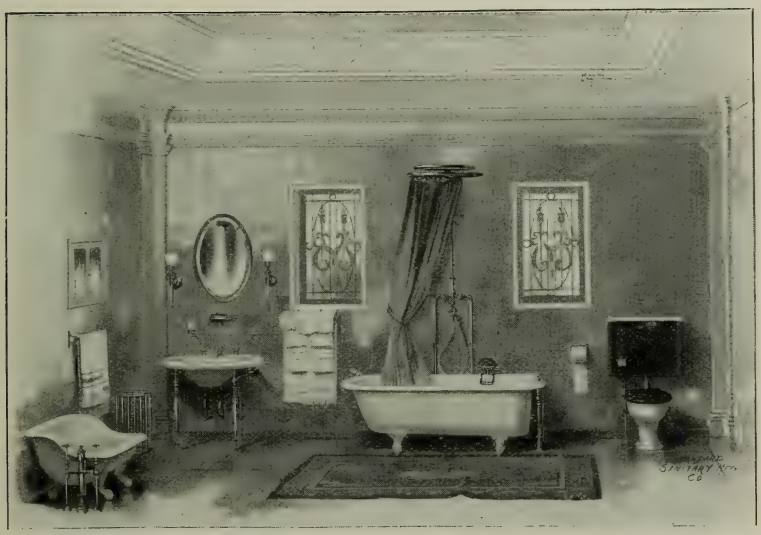
LAVATORY, Blanco P Marble, with Nickel Plated Offset Legs, Basin Cocks, Supply Pipes with Stops, Ideal Waste, Trap and 15x19 Basin, ... 100.00

WATER CLOSET, Adamantose Siphon Jet, Decorated Bowl with Gold Lines, Quartered Oak Tank, Seat and Cover, Nickel Plated Hinges, Supply Pipe with Stop, M-111, ... 51.00

MISCELLANEOUS TRIMMINGS.

Mirror, Nickel Plated Brass Frame, 33x30 inches, T-325, ... 28.00
Tooth Brush Holder, T-212, ... 2.00
Brush Tray, T-255, ... 2.75
Tumbler Holder, T-213 . . . . . 2.00
Coat Hook, T-262, ... 1.25
Robe Hook, T-273, ...30
Towel Basket, T-285, ... 13.50
Towel Shelf and Bar, 27 inches, T-186, ... 10.00
Towel Arms, T-202, ... 3.75
Combination Soap and Sponge Holder, T-246, ... 4.00
Paper Holder, T-311, ... 5.00

BATH ROOM INTERIORS.



BATH ROOM DESIGN E.

Approximate Cost of Fixtures, ... $360.00

BATH, Porcelain Enameled, with 3-inch Roll-rim, Nickel Plated Ideal Bell Supply and Waste Fittings through Rim, Ivory Exterior Finish, P-36 (5-foot), ... $73.25

SHOWER, Nickel Plated Shower Bath with Rubber Curtain, Wall Hook and Chain, and Shampoo Attachment, . 38.00

SITZ BATH, P-106, Porcelain Enameled, with 3-inch Roll-rim, Nickel Plated Ideal Bell Supply and Waste Fittings, Ivory Exterior Finish, ... 52.50

LAVATORY, American Porcelain Elliptical, Q-30, Nickel Plated Legs and Frame, Corinthian Combination Supply and Waste Fittings, Supply Pipes with Air Chambers and Stops, and Trap, ... 83.60

WATER CLOSET, Adamantose Siphon Jet Bowl, M-111, Quartered Oak Tank with Blanco P Marble Top, Seat and Cover, Nickel Plated Hinges, Supply Pipe with Stop, ... 50.00

MISCELLANEOUS TRIMMINGS.

Towel Shelf and Bar, T-186, 27 inches long, ... 10.00
Towel Bar. T-196, 20 inches long, ... 1.25
Coat Hook, ...50
Brush Tray, T-255, ... 2.75
Tooth Brush Holder, T-212, ... 2.00
Wall Soap Dish, T-226, ... 2.00
Towel Basket, T-285, ... 13.50
Mirror, 24x33 inches, T-337, ... 25.00
Combination Soap and Sponge Holder, T-246, ... 4.00
Toilet Paper Holder, T-315, ... 1.75

BATH ROOM INTERIORS.



BATH ROOM DESIGN G.

Approximate Cost of Fixtures, ... $252.25

BATH, Porcelain Enameled, with 3-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings, Zinc White Exterior Finish and Border, P-59,	$68.00
SHAMPOO, Nickel Plated 3-Valve Wall Shampoo Fixture with Rubber-Bound Sprinkler,	10.00
LAVATORY, American Porcelain Lavatory with Back, Heavy Nickel Plated Brackets, No. 0 Fuller Basin Cocks with Supplies, Nickel Plated Trap with Vent,	43.50
FOOT BATH, Porcelain Enameled, with 2½-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings, Zinc White Exterior Finish and Border,	50.00
WATER CLOSET, Adamantose Embossed Siphon Jet Bowl with Hardwood Tank, Seat and Cover, Nickel Plated Supply Pipe, M-114,	37.00
MISCELLANEOUS TRIMMINGS.	
Mirror,	25.00
Glass Shelf,	7.50
Towel Rack for Lavatory,	2.75
Towel Rack for Bath,	2.25
Sponge Holder,	2.00
Coat Hook,	.50
Bath Soap Dish, T-244,	2.00
Toilet Paper Holder, T-315,	1.75

BATH ROOM INTERIORS.



BATH ROOM DESIGN J.

Approximate Cost of Fixtures, ... 208.75

BATH, Porcelain Enameled, with 3-inch Rolled Rim, Nickel Plated Fuller Double Bath Cock, Supply Pipes, and Standing Waste, Zinc White Exterior Finish with Gold Lines (5-foot size),	$56.75
SHOWER, Portable Shower Bath with Rubber Curtain and Connecting Hose,	15.00
LAVATORY, Porcelain Slab and Bowl with Aprons on four sides, Nickel Plated Brackets, Nickel Plated Compression Basin Cocks, Supply Pipes and P Trap. With Fittings complete,	20.00
FOOT BATH, Porcelain Enameled, with 2½-inch Roll-rim, Nickel Plated Bell Supply and Waste Fittings, Zinc White Exterior Finish with Gold Lines,	46.00
WATER CLOSET, Adamantose Oval Siphon Wash-down Bowl with Hardwood Tank, Seat and Cover, Nickel Plated Supply Pipe, M-116,	36.00
MISCELLANEOUS TRIMMINGS.	
Mirror, 18x24 inches, T-324,	16.00
Glass Shelf,	7.50
Wall Soap Dish, T-226,	2.75
Towel Bar for Lavatory, T-196,	1.25
Towel Bar for Bath, T-196,	1.25
Coat Hook,	.50
Toilet Paper Holder, T-315,	1.75
Combination Soap and Sponge Holder, T-246,	4.00

BATH ROOM INTERIORS.



BATH ROOM DESIGN M.

Approximate Cost of Fixtures, ... $144.00

BATH, Porcelain Enameled, 2½-inch Roll-rim, Nickel Plated Fuller Double Bath Cock, Offset Supply Pipes, Connected Waste and Overflow, and Soap Dish, No. 1 Zinc White Exterior Finish, P-81 (5-foot size), . . $44.00

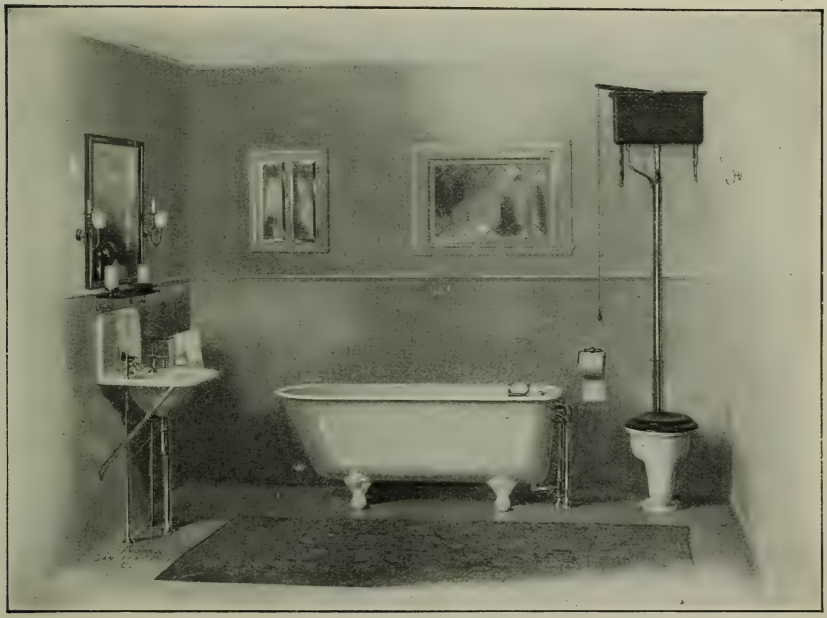
LAVATORY, Porcelain Enameled all over Slab and Bowl with Aprons on four sides, all cast integral, Enameled Brackets, Nickel Plated Compression Basin Cocks, Supply Pipes and P Trap, ... 23.00

WATER CLOSET, Adamantose Siphon Wash-down Bowl with Hardwood Tank, Seat and Cover, Nickel Plated Supply Pipe, M-119, ... 34.00

MISCELLANEOUS TRIMMINGS.

Mirror,	24.00
Glass Shelf,	7.50
Wall Soap Dish,	1.75
Towel Hooks,	4.00
Towel Bar,	1.50
Coat Hook,	.50
Toilet Paper Holder,	1.75
Bath Soap Dish, T-244,	2.00

BATH ROOM INTERIORS.



BATH ROOM DESIGN Q.

Approximate Cost of Fixtures, ... $141.50

BATH, Porcelain Enameled, with 2½-inch Roll-rim, Nickel Plated Fuller Double Bath Cock, Offset Supply Pipes, Connected Waste and Overflow, No. 1 Zinc White Exterior Finish, P-81 (5-foot size), ... $44.00

LAVATORY, R-115, ... 30.50

WATER CLOSET, Porcelain Washout Bowl with Hardwood Tank, Seat and Cover, Nickel Plated Brackets, Flush and Supply Pipes, Chain and Pull, M-256, ... 34.00

MISCELLANEOUS TRIMMINGS.

Mirror, 18x33 inches, T-333, ... 20.00
Glass Shelf, ... 7.50
Towel Bar, T-196, ... 1.25
Coat Hook, ...50
Toilet Paper Holder, T-315, ... 1.75
Bath Soap Dish, T-244, ... 2.00

BATH ROOM INTERIORS.



BATH ROOM DESIGN T.

Approximate Cost of Fixtures, ... $136.50

BATH, Porcelain Enameled, with 2¼-inch Roll-rim, Nickel Plated Fuller Double Bath Cock, Offset Supply Pipes, Connected Waste and Overflow, No. 1 Zinc White Exterior Finish, P-81 (4½-foot size), ... $41.75

LAVATORY, Porcelain Enameled Slab and Bowl with Apron and Back cast integral, Waste, Nickel Plated Soap Dish, Compression Basin Cocks, Supply Pipes and Vented S Trap, ... 23.50

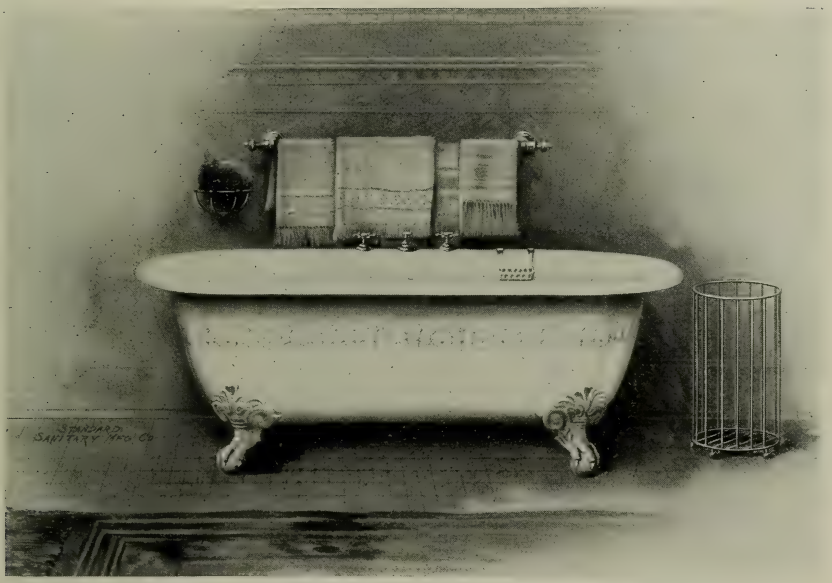
WATER CLOSET, Adamantose Siphon Wash-down Bowl with Hardwood Tank, Seat and Cover, Nickel Plated Supply Pipe, M-119, ... 34.00

MISCELLANEOUS TRIMMINGS.

Mirror, ... 24.00
Glass Shelf, ... 7.50
Towel Bar, T-196, ... 1.25
Coat Hook, ...50
Bath Soap Dish, T-244, ... 2.00
Toilet Paper Holder, T-315, ... 1.75

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.



P-13.

Includes White Enameled Bath with 4¾-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white with Empire Border, finished Nickel Plated Ideal Waste and Overflow, Bell Supply Fittings with China Handles, Slip Joint Unions on Waste and Supplies.

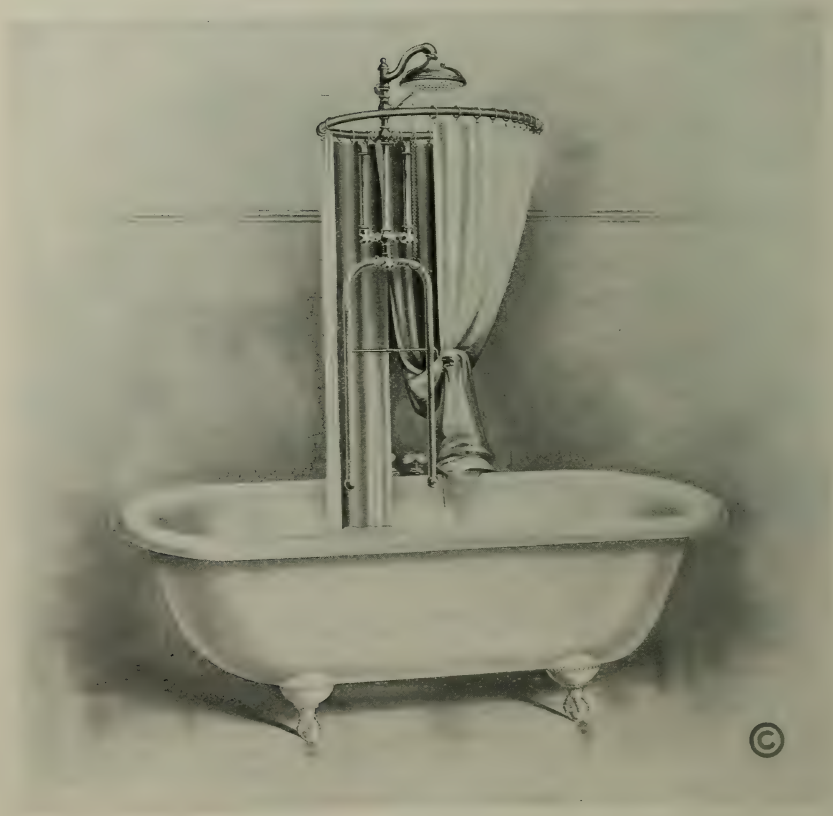
DIMENSIONS AND PRICES.

		5 ft.	5½ ft.	6 ft
Size of Tub,				
Length over Rim,	Inches	61	67	73
Width over Rim,	Inches	35½	35½	35½
Width inside,	Inches	26	26	26
Depth inside,	Inches	19	19	19
Height on Legs,	Inches	25	25	25
No. 1. With plain Exterior and finished Nickel Plated Waste and Overflow, Bell Supply Fittings and Supply Pipes to floor, complete,		$67.25	$71.25	$75.25
No. 2. With Decorated Exterior in Ivory-white and finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes to floor, all complete,		80.25	84.25	88.25
No. 3. With Decorated Exterior in Ivory-white and Empire Design, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes to floor, all complete,		91.25	95.25	99.25

If with Nickel Plated Towel Bar, add $3.75; Sponge Holder, $2.25; Soap Dish, $2 50; Towel Basket, $13.50.

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.



P-15.

White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Shower with Rubber Curtain, Ideal Waste and Overflow, Bell Supply Fittings with China Handles, Unions on Waste and Supplies.

	5 ft.	5½ ft.	6 ft.
Prices, as described,	$133.25	$138.25	$143.25

Dimensions same as P-17.

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.



P-17.

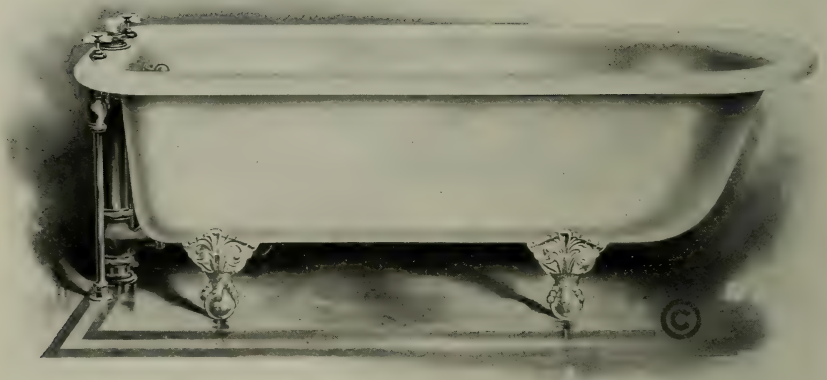
White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Ideal Waste and Overflow, Bell Supply Fittings with China Handles, Shampoo and Sprinkler, Unions on Waste and Supplies.

DIMENSIONS AND PRICES.

Size of Tub, Length over Rim	5 ft.	5½ ft.	6 ft.
Width over all, Inches	36	36	36
Width over Rim, Inches	32	32	32
Width inside, Inches	26	26	26
Depth inside, Inches	17	17	17
Height on Legs, Inches	22½	22½	22½
No. 1. With Plain Exterior, finished Nickel Plated Waste, Bell Supply Fittings, Supply Pipes, and Shampoo and Sprinkler, complete,	$72.25	$77.25	$82.25
No. 2. With Decorated Exterior, Ivory-white, finished Nickel Plated Waste, Bell Supply Fittings, Supply Pipes, and Shampoo and Sprinkler, complete,	85.25	90.25	95.25
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, finished Nickel Plated Waste, Bell Supply Fittings, Supply Pipes, and Shampoo and Sprinkler, complete,	88.00	93.25	98.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED, ROLLED RIM.



P-20.

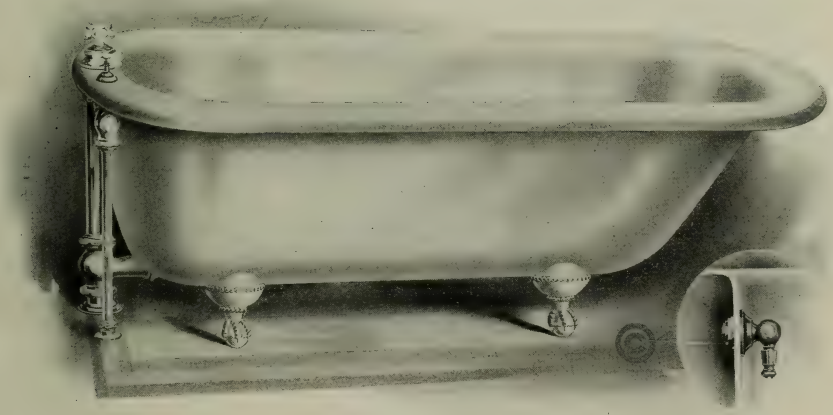
White Enameled Bath with 4-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, Nickel Plated Ideal Waste, Nozzle Supply Fittings with China Handles, Unions on Waste and Supplies.

DIMENSIONS AND PRICES.

Size of Tub,		4½ ft.	5 ft.	5½ ft.
Length over Rim,	Inches	62½	68½	74½
Width over Rim,	Inches	33	33	33
Width inside	Inches	25	25	25
Depth inside,	Inches	17	17	17
Height on Legs,	Inches	22	22	22
No. 1. With Plain Exterior and Nickel Plated Waste, Nozzle Supply Fittings, complete,		$61.25	$65.75	$70.25
No. 2. With Decorated Exterior in Ivory-white, Nickel Plated Waste, Nozzle Supply Fittings, complete as shown,		74.25	78.75	83.25
No. 3. With Decorated Exterior in Ivory-white and Gold Bands, Nickel Plated Waste, Nozzle Supply Fittings, complete		77.25	81.75	86.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. UNDER-ROLL RIM.



P-25.

White Enameled Bath with 4-inch Enameled Under-roll Rim, Decorated Exterior, Ivory-white, Nickel Plated Ideal Waste, Nozzle Supply Fittings with China Handles, Slip Joint Unions on Supplies.

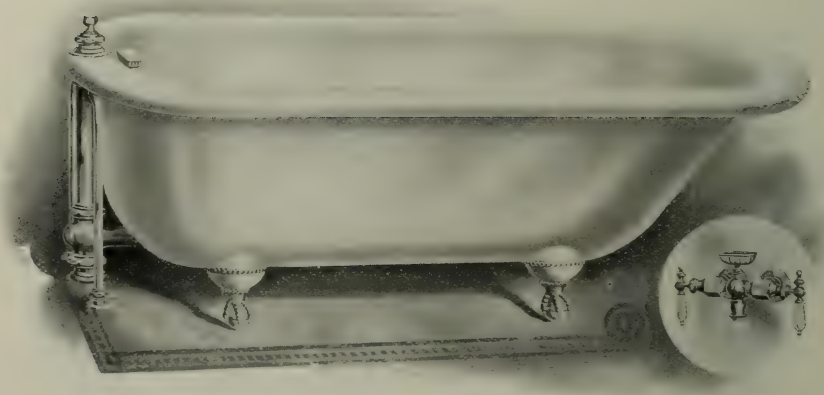
DIMENSIONS AND PRICES.

Size of Tub,	Length over Rim	4½ ft.	5 ft.	5½ ft.	6 ft.
Width over Rim,	Inches	33	33	33	33
Width inside,	Inches	24½	24½	24½	24½
Depth inside,	Inches	17	17	17	17
Height on Legs,	Inches	22	22	22	22

No. 1.	With Plain Exterior, Nickel Plated Waste, Nozzle Supply Fittings, complete,	$57.25	$62.25	$67.25	$72.25
No. 2.	With Decorated Exterior, Ivory-white, Nickel Plated Waste, Nozzle Supply Fittings, complete,	70.25	75.25	80.25	85.25
No. 3.	With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Waste, Nozzle Supply Fittings, complete,	73.25	78.25	83.25	88.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. UNDER-ROLL RIM



P-27.

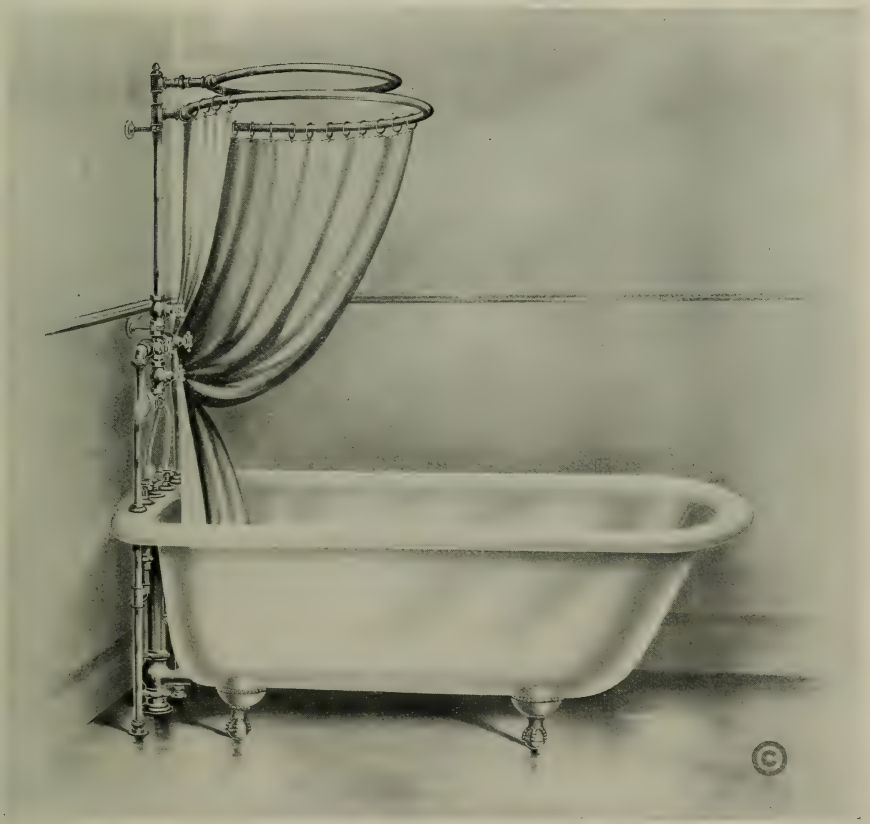
White Enameled Bath with 4-inch Enameled Under-Roll Rim, Decorated Exterior, Ivory-white, Clow Special No. 5 Double Bath Cock with Soap Dish and China Removable Tray, Supplies and Ideal Waste with China Name Plate, Slip Joint Unions on Supplies.

DIMENSIONS AND PRICES.

Size of Tub, Length over Rim	4½ ft.	5 ft.	5½ ft.	6 ft.
Width over Rim, Inches	33	33	33	33
Width inside, Inches	24½	24½	24½	24½
Depth inside, Inches	17	17	17	17
Height on Legs, Inches	22	22	22	22
No. 1. With Plain Exterior, Nickel Plated Waste, No. 5 Double Bath Cock and Supply Pipes, complete,	$54.00	$59.00	$64.00	$69.00
No. 2. With Decorated Exterior, Ivory-white, Nickel Plated Waste, No. 5 Double Bath Cock and Supply Pipes, complete,	67.00	72.00	77.00	82.00
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Waste, No. 5 Double Bath Cock and Supply Pipes, complete,	70.00	75.00	80.00	85.00

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.



P-34.

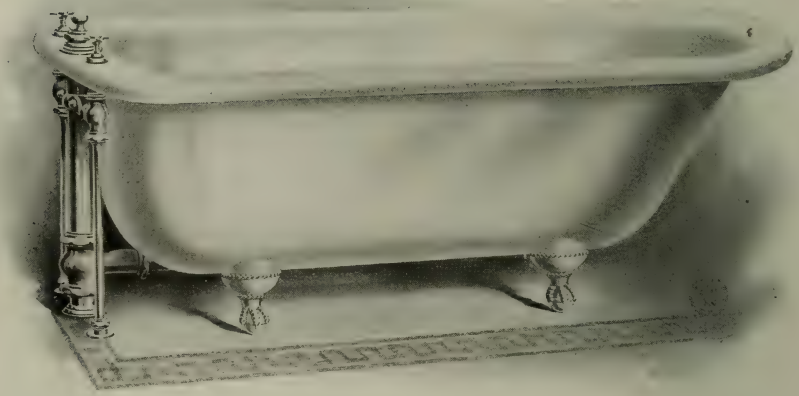
White Enameled Rolled Rim Bath, Rim 3 inches wide on sides and 5 inches wide on supply end, Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Shower and Shampoo with Rubber Curtain, Ideal Waste and Overflow, Bell Supply Fittings with China Name Plates, Slip Joint Unions on Supplies.

	4½ ft.	5 ft.	5½ ft.
Prices, as described,	$120.25	$126.25	$132.25

Dimensions same as P-32.

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.



P-36.

White Enameled Rolled Rim Bath, Rim 3 inches wide on sides and 5 inches wide on supply end, Decorated Exterior, Ivory-white, Nickel Plated Ideal Waste and Overflow, Nozzle Supply Fittings with China Name Plates, Slip Joint Unions on Supplies.

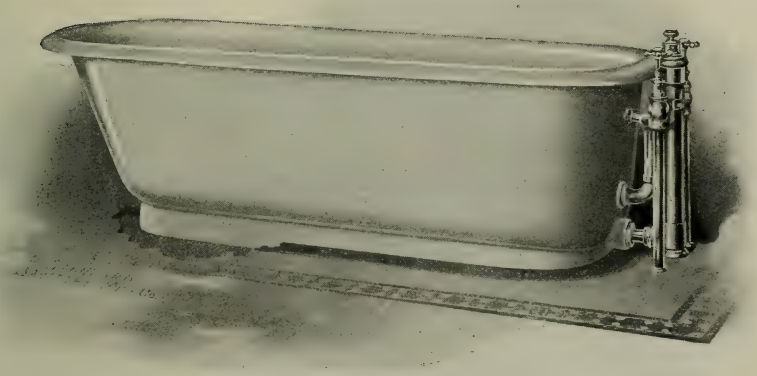
DIMENSIONS AND PRICES.

		4½ ft.	5 ft.	5½ ft.
Size of Tub,				
Length over Rim,	Inches	62½	68½	74½
Width over Rim,	Inches	30	30	30
Width inside,	Inches	24	24	24
Depth inside,	Inches	17	17	17
Height on Legs,	Inches	22	22	22

No. 1.	With Plain Exterior, Nickel Plated Waste, Nozzle Supply Fittings, complete,	$54.25	$60.25	$66.25
No. 2.	With Decorated Exterior, Ivory-white, Nickel Plated Waste, Nozzle Supply Fittings, complete,	67.25	73.25	79.25
No. 3.	With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Waste, Nozzle Supply Fittings, complete,	70.25	76.25	82.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.



P-41.

White Enameled Bath with 3-inch Enameled Rolled Rim, Enameled Base Integral with Tub, Decorated Exterior, Ivory-white, finished Nickel Plated Ideal Waste and Overflow, Bell Supply Fittings, Supply Pipes and Slip Joint Unions on Supplies.

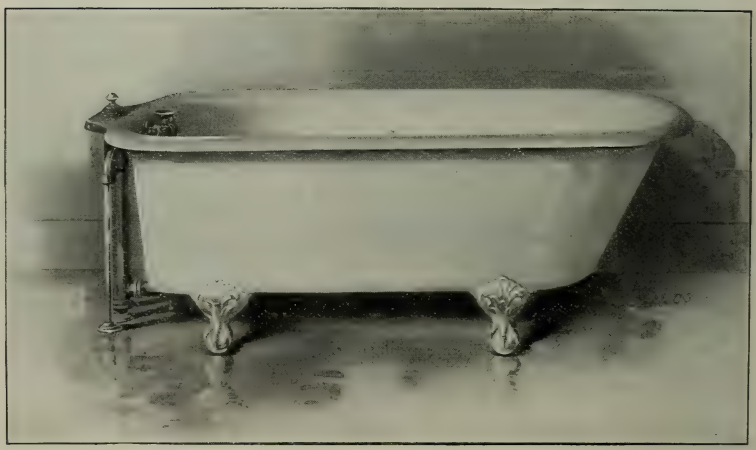
DIMENSIONS AND PRICES.

		5 ft.	5½ ft.
Size of Tub,			
Length over Rim,	Inches	62	68
Length over all,	Inches	66	72
Width over Rim,	Inches	29	29
Width inside,	Inches	23	23
Depth inside,	Inches	16½	16½
Height from bottom of Flange to Rim of Tub,	Inches	20½	20½
Height of Base or Flange (from bottom of Flange to bottom of Tub)	Inches	4½	4½
No. 1. With Plain Exterior, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes, complete,		$60.25	$66.25
No. 2. With Decorated Exterior, Ivory-white, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes, complete as shown,		73.25	79.25
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes, complete,		76.25	82.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN



P-45.

White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Fuller Double Bath Cock, Offset Supply Pipes and Iocal Waste.

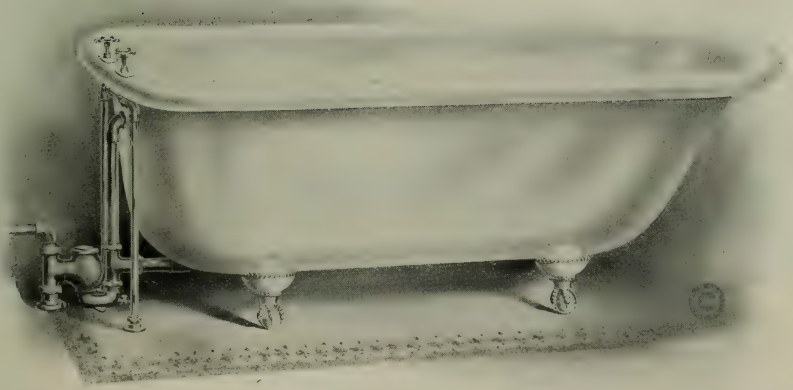
DIMENSOINS AND PRICES.

Size of Tub,	4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over all, Inches	57	60	66	72	78
Width over Rim, Inches	30	30	30	30	30
Width inside, Inches	24	24	24	24	24
Depth inside, Inches	17	17	17	17	17
Height on Legs, Inches	22½	22½	22½	22½	22½
No. 1. With Plain Exterior, Nickel Plated Fuller Double Bath Cock, Supplies and Waste, complete,	$40.75	$40.75	$44.75	$47.50	$52.00
No. 2. With Decorated Exterior, Ivory-white. Nickel Plated Fuller Double Bath Cock, Supplies and Waste, complete, as shown,	53.75	53.75	57.75	60.50	65.00
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Fuller Double Bath Cock, Supplies and Waste, complete,	56.75	56.75	60.75	63.50	68.00

CLOW PORCELAIN LINED IRON BATHS.

WITH SPECIAL © BATH TRAP.

PATENTED.



P-48.

White Enameled Bath with 3-inch Enameled Rolled Rim, Plain Exterior, finished Nickel Plated "Special C" Bath Cock with Supply Pipes and Unions for ½-inch Iron Pipe, Nickel Plated Combined Overflow and Waste with Rubber Stopper and Chain, Nickel Plated Polished Brass "Special C" Bath Trap with Waste and Vent for Iron Pipe Connections.

DIMENSIONS AND PRICES.

Size of Tub		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches,	50	56	62	68	74
Length over all,	Inches,	51	57	63	69	75

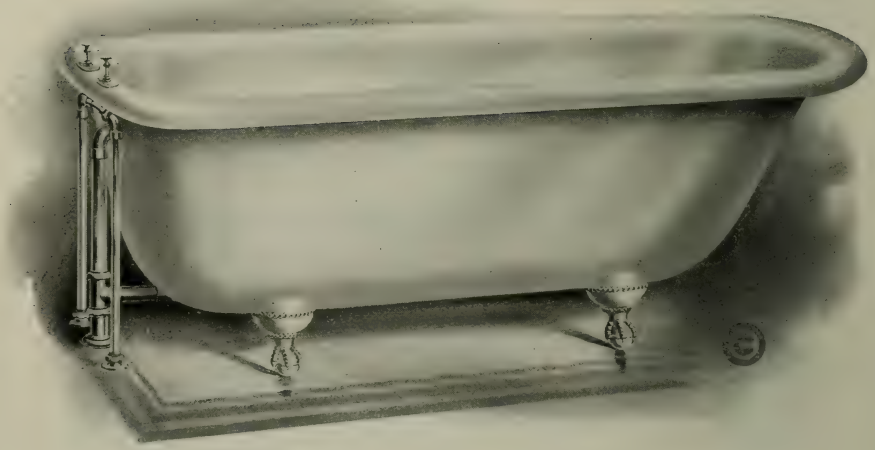
Width over Rim, 30 inches; width inside, 24 inches; depth inside, 17 inches; height on legs, 22½ inches.

No. 1	With Plain Exterior, as described,	$41.25	$43.25	$46.50	$50.25	$55.25
No. 2	With Decorated Exterior, Ivory White, as shown and described,	51.25	53.25	56.50	60.25	65.25
No. 3	With Decorated Exterior, Ivory White with Gold Bands, as described,	53.25	55.25	58.50	62.25	67.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN.



P-50.

Includes White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated "Special C Bath Cock with China Handles, Supply Pipes and Combined Overflow and Waste with Rubber Stopper.

DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	50	56	62	68	74
Length over all,	Inches	51	57	63	69	75

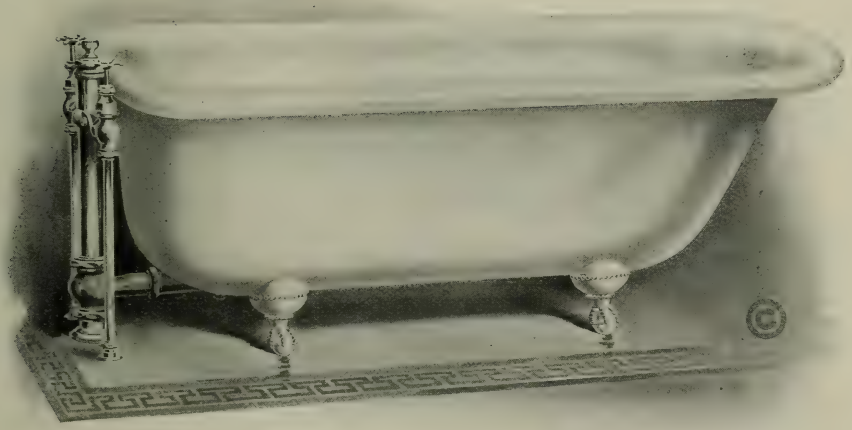
Width over rim, 30 inches; width inside, 24 inches; depth inside, 17 inches; height on legs, 22½ inches.

No. 1.	With Plain Exterior, Nickel Plated "Special C" Bath Cock, Supplies and Overflow, complete,	$37.50	$37.50	$40.50	$44.25	$48.75
No. 2.	With Decorated Exterior, Ivory-white, Nickel Plated "Special C" Bath Cock, Supplies and Overflow, complete as shown,	50.50	50.50	53.50	57.25	61.75
No. 3.	With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated "Special C" Bath Cock, Supplies and Overflow, complete,	53.50	53.50	56.50	60.25	64.75

CLOW'S PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM

SPECIAL © PATTERN.



P-59.

Includes White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Ideal Waste and Overflow Bell Supply Fittings and Supply Pipes.

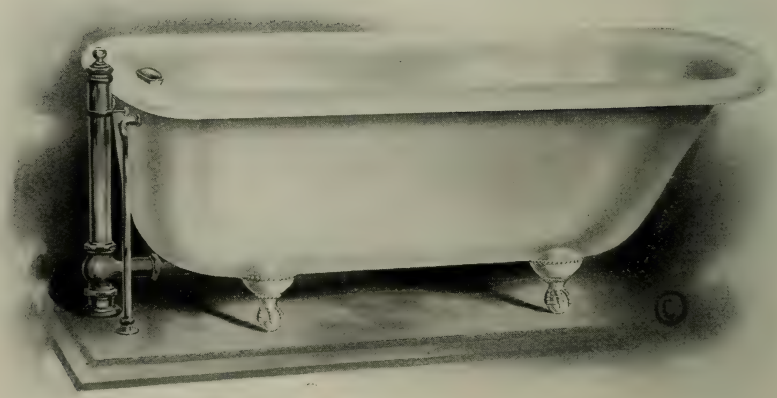
DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	50	56	62	68	74
Length over all,	Inches	54	60	66	72	78
Width over Rim,	Inches	30	30	30	30	30
Width inside,	Inches	24	24	24	24	24
Depth inside,	Inches	17½	17½	17½	17½	17½
Height on Legs,	Inches	23	23	23	23	23
No. 1. With Plain Exterior, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes, complete,		$41.00	$41.00	$44.00	$47.75	$52.25
No. 2. With Decorated Exterior, Ivory-white, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes, complete as shown,		54.00	54.00	57.00	60.75	65.25
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, finished Nickel Plated Waste, Bell Supply Fittings and Supply Pipes, complete,		57.00	57.00	60.00	63.75	68.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN



P-62.

White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Ideal Waste and Overflow Fuller Double Bath Cock and Offset Supply Pipes.

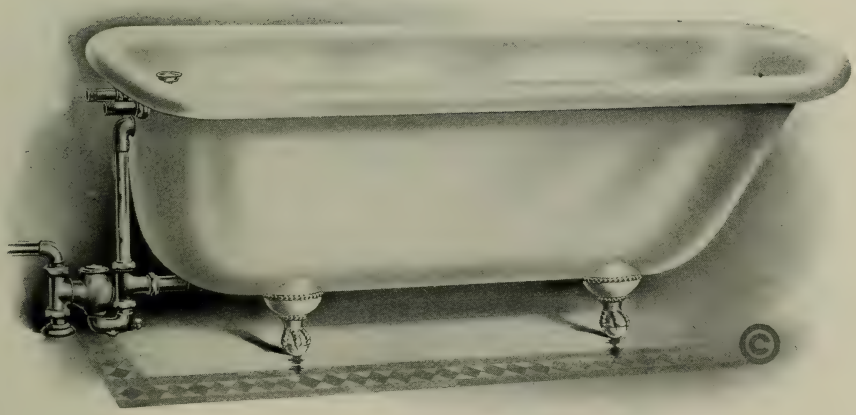
DIMENSIONS AND PRICES.

Size of Tub.		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	50	56	62	68	74
Length over all,	Inches	54	60	66	72	78
Width over Rim,	Inches	30	30	30	30	30
Width inside,	Inches	24	24	24	24	24
Depth inside	Inches	17½	17½	17½	17½	17½
Height on Legs	Inches	23	23	23	23	23
No. 1. With Plain Exterior, finished Nickel Plated Waste, Fuller Double Bath Cock and Offset Supply Pipes, complete,		$37.75	$37.75	$40.75	$44.75	$49.00
No. 2. With Decorated Exterior, Ivory-white, finished Nickel Plated Waste, Fuller Double Bath Cock and Offset Supply Pipes, complete as shown,		50.75	50.75	53.75	58.50	52.75
No. 3 With Decorated Exterior, Ivory-white with Gold Bands, finished Nickel Plated Waste, Fuller Double Bath Cock and Offset Supply Pipes, complete		53.75	53.75	56.75	61.75	55.75

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN.



P-65.

Includes White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Fuller Double Bath Cock and Combined Overflow and Waste, "Special C" Bath Trap with Drain Cock.

DIMENSIONS AND PRICES.

		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Size of Tub,						
Length over Rim,	Inches	50	56	62	68	74
Length over all,	Inches	51	57	63	69.	75

Width over rim, 30 inches; width inside, 24 inches; depth inside, 17 inches; height on legs, 24¼ inches.

No. 1.	With Plain Exterior and Nickel Plated Fuller Double Bath Cock and Combined Overflow and Waste with Trap, complete,	$34.50	$34.50	$37.50	$41.25	$45.75
No. 2.	With Decorated Exterior, Ivory-white, Nickel Plated Fuller Double Bath Cock and Combined Overflow and Waste with Trap, complete as shown,	47.50	47.50	50.50	54.25	58.75

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN.



P-70.

Includes White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Fuller Double Bath Cock, Offset Supply Pipes and Combined Overflow and Waste with Rubber Stopper.

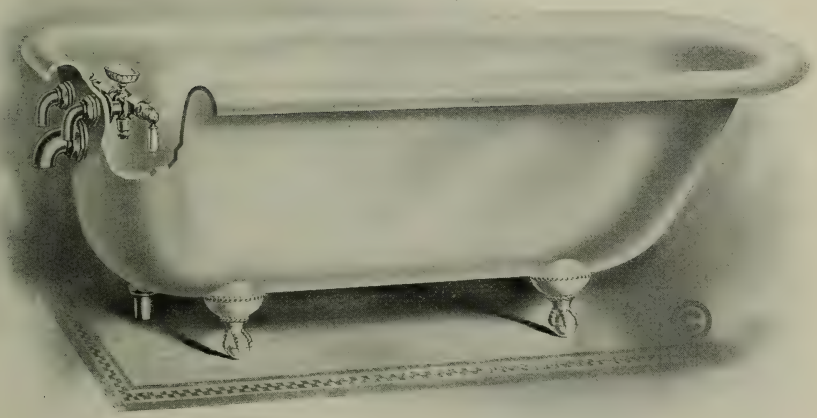
DIMENSIONS AND PRICES.

Size of Tub,	4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim, Inches	50	56	62	68	74
Length over all, Inches	51	57	63	69	75
Width over Rim, Inches	30	30	30	30	30
Width inside, Inches	24	24	24	24	24
Depth inside, Inches	17½	17½	17½	17½	17½
Height on Legs, Inches	23	23	23	23	23
No. 1. With Plain Exterior, Nickel Plated Fuller Double Bath Cock, Supplies and Overflow, complete,	$32.25	$32.25	$35.25	$39.00	$43.50
No. 2. With Decorated Exterior, Ivory-white, Nickel Plated Fuller Double Bath Cock, Supplies and Overflow, complete as shown,	45.25	45.25	48.25	52.00	56.50
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Fuller Double Bath Cock, Supplies and Overflow, complete,	48.25	48.25	51.25	55.00	59.50

CLOW'S PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN.



P-73.

Includes White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Fuller Double Bath Cock, Overflow and Strainer, and Waste Plug with Rubber Stopper.

DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	50	56	62	68	74
Width over Rim,	Inches	30	30	30	30	30
Width inside,	Inches	24	24	24	24	24
Depth inside,	Inches	17½	17½	17½	17½	17½
Height on Legs,	Inches	23	23	23	23	23
No. 1. With Plain Exterior, Nickel Plated Fuller Double Bath Cock, Overflow and Strainer, and Waste Plug with Rubber Stopper, complete,		$27.00	$27.00	$30.00	$33.75	$38.25
No. 2. With Decorated Exterior, Ivory-white, Nickel Plated Fuller Double Bath Cock, Overflow and Strainer, and Waste Plug with Rubber Stopper, complete as shown,		40.00	40.00	43.00	46.25	51.25
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Fuller Double Bath Cock, Overflow and Strainer, and Waste Plug with Rubber Stopper, complete,		43.00	43.00	46.00	49.25	54.25

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

SPECIAL © PATTERN.



P-76.

Includes White Enameled Bath with 3-inch Enameled Rolled Rim, Plain Exterior, Nickel Plated Overflow and Strainer, and Waste Plug with Rubber Stopper.

DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	50	56	62	68	74
Width over Rim,	Inches	30	30	30	30	30
Width inside,	Inches	24	24	24	24	24
Depth inside,	Inches	17½	17½	17½	17½	17½
Height on Legs,	Inches	23	23	23	23	23

No. 1. With Plain Exterior, Nickel Plated Overflow and Strainer, and Waste Plug with Rubber Stopper, complete, ... $24.00 $24.00 $27.00 $30.75 $35.25

With Electro Bronzed or Nickel Plated Iron Legs add $1.00 each, Polished Brass Legs add $2.50 each, Nickel Plated Brass Legs add $3.00 each.

P-76 Bath is not drilled for Bath Cock.

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

"VERONA."



P-81.

White Enameled Bath with 2½-inch Enameled Rolled Rim, Plain Exterior, Nickel Plated Fuller Double Bath Cock, Offset Supply Pipes, Combined Overflow and Waste with Rubber Stopper,

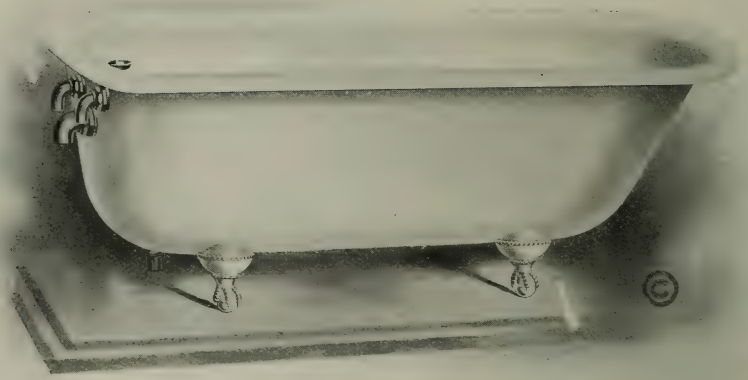
DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	49	55	61	67	73
Width over Rim,	Inches	28½	28½	28½	28½	28½
Width inside,	Inches	24	24	24	24	24
Depth inside,	Inches	17½	17½	17½	17½	17½
Height on Legs,	Inches	23	23	23	23	23
No. 1. With Plain Exterior, Nickel Plated Fuller Double Bath Cock, Supplies and Overflow, complete as shown,		$30.00	$30.00	$32.25	$36.00	$40.50
No. 2. With Decorated Exterior, Ivory-white, Nickel Plated Fuller Double Bath Cock, Supplies and Overflow, complete,		43.00	43.50	45.25	49.00	53.50
No. 3. With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Fuller Double Bath Cock, Supplies and Overflow, complete,		46.00	46.00	48.25	52.00	56.50

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

"VERONA"



P-85.

White Enameled Bath with 2¼-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, Nickel Plated Fuller Double Bath Cock, Nickel Plated Overflow and Strainer, and Waste Plug with Rubber Stopper.

DIMENSIONS AND PRICES.

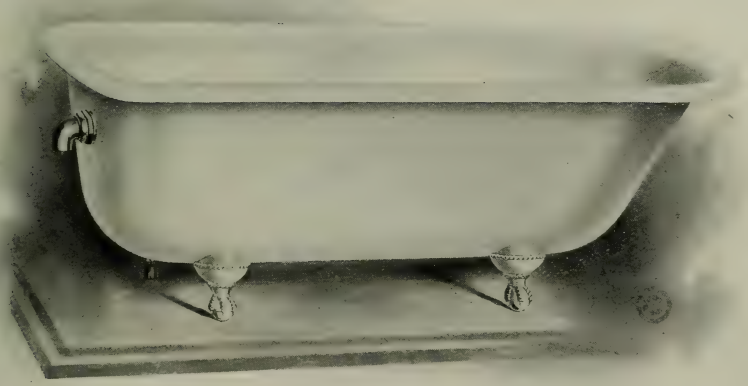
Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	49	55	61	67	73
Width over Rim,	Inches	28½	28½	28½	28½	28½
Width inside,	Inches	24	24	24	24	24
Depth inside	Inches	17½	17½	17½	17½	17½
Height on Legs,	Inches	23	23	23	23	23

No. 1.	With Plain Exterior, Nickel Plated Fuller Double Bath Cock, Overflow and Strainer, and Waste Plug with Rubber Stopper, complete,	$24.75	$24.75	$27.00	$30.75	$35.25
No. 2.	With Decorated Exterior, Ivory-white, Nickel Plated Fuller Double Bath Cock. Overflow and Strainer and Waste Plug with Rubber Stopper, complete as shown,	37.75	37.75	40.00	43.75	48.25
No. 3.	With Decorated Exterior, Ivory-white with Gold Bands, Nickel Plated Fuller Double Bath Cock, Overflow and Strainer, and Waste Plug with Rubber Stopper, complete,	40.75	40.75	43.00	46.75	51.75

CLOW PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

"VERONA."



P-88.

White Enameled Bath with 2½-inch Enameled Rolled Rim, Plain Exterior, Nickel Plated Overflow and Strainer, and Waste Plug with Rubber Stopper.

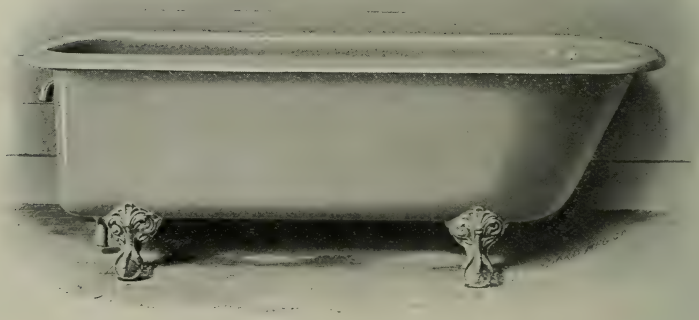
DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	49	55	61	67	73
Width over Rim,	Inches	28½	28½	28½	28½	28½
Width inside,	Inches	24	24	24	24	24
Depth inside,	Inches	17½	17½	17½	17½	17½
Height on Legs,	Inches	23	23	23	23	23
No. 1. With Plain Exterior, Nickel Plated Overflow and Strainer, Waste Plug with Rubber Stopper, complete,		$21.75	$21.75	$24.00	$27.75	$32.25

PIGMY PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

TO REPLACE COPPER TUBS.



P-91.

Pigmy White Enameled Bath with 1½-inch Enameled Rolled Rim, Plain Exterior, Nickel Plated Overflow and Strainer, and Waste Plug with Rubber Stopper.

DIMENSIONS AND PRICES.

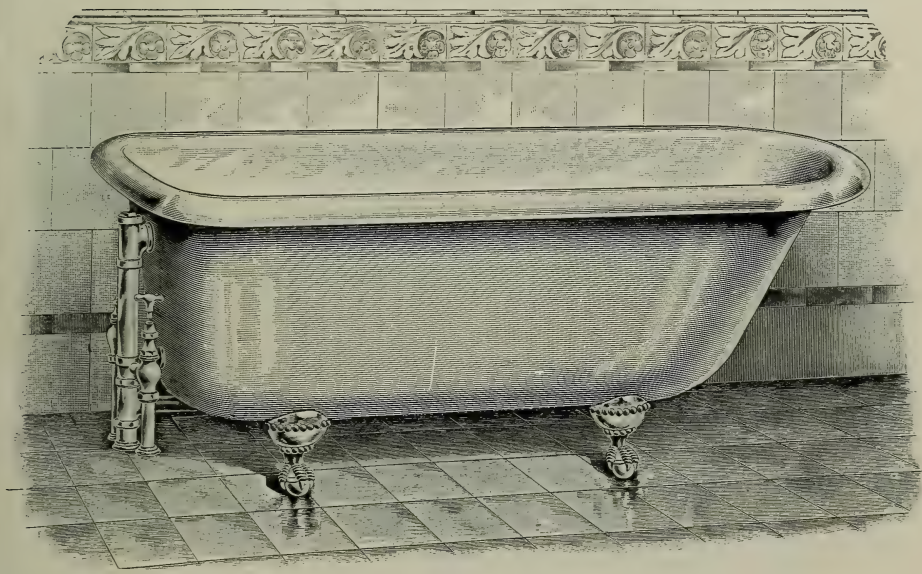
Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	48½	54½	60½	66½	72½
Width over Rim,	Inches	24½	24½	24½	24½	24½
Width inside,	Inches	21½	21½	21½	21½	21½
Depth inside,	Inches	18	18	18	18	18
Height on Legs,	Inches	23	23	23	23	23
No. 1. With Plain Exterior, Nickel Plated Overflow and Strainer, and Waste Plug with Rubber Stopper, complete as shown,		$21.75	$21.75	$24.00	$27.75	$32.25

Our Pigmy Tub is unusually narrow, with special narrow Rim. The Pigmy is designed to replace Copper Tubs and requires no more space. It can be substituted for the old Tub without any change in the roughing in, and will be found a great saver of time and expense. This Tub is also desirable for use in small bath rooms.

CLOW'S PORCELAIN-LINED IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

FOR HOSPITALS, ASYLUMS, SANITARIUMS AND PUBLIC BATHS.



P-95.

Includes White Enameled Bath with 3-inch Rolled Rim, Plain Exterior, finished Nickel Plated Combined Waste and Overflow, Bell Supply Fittings with Loose Keys, and Supply Pipes.

DIMENSIONS AND PRICES.

Size of Tub,		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Length over Rim,	Inches	50	56	62	68	74
Length over all,	Inches	54	60	66	72	78
Width over Rim,	Inches	30	30	30	30	30
Width inside,	Inches	24	24	24	24	24
Depth inside,	Inches	17	17	17	17	17
Height on Legs,	Inches	22½	22½	22½	22½	22½
Price, as described,		$36.50	$36.50	$39.50	$43.25	$47.75

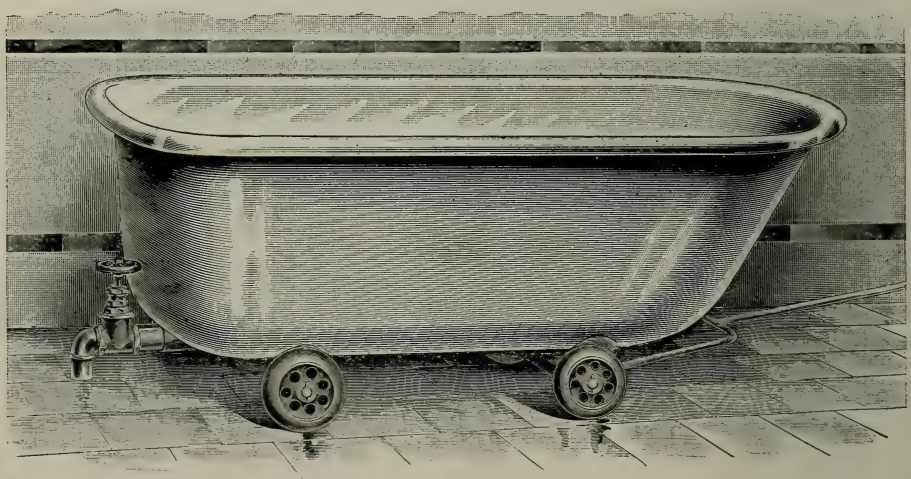
If with 2-inch combined Overflow and Waste, add $3.00; If with Rough Brass Fittings, deduct $3.00.

The Supply Fixtures, having Removable Key, can be operated only by the attendant.
Any of our French Pattern Tubs can be furnished with fixtures as shown.

CLOW'S PORTABLE IRON BATHS.

WHITE ENAMELED. ROLLED RIM.

FOR HOSPITALS AND ASYLUMS.



P-97.

Includes Portable Enameled Iron Bath with *2½-inch Enameled Roll Rim, Rough Brass Valve, Rubber Tired Wheels and Handle. Painted one coat outside.

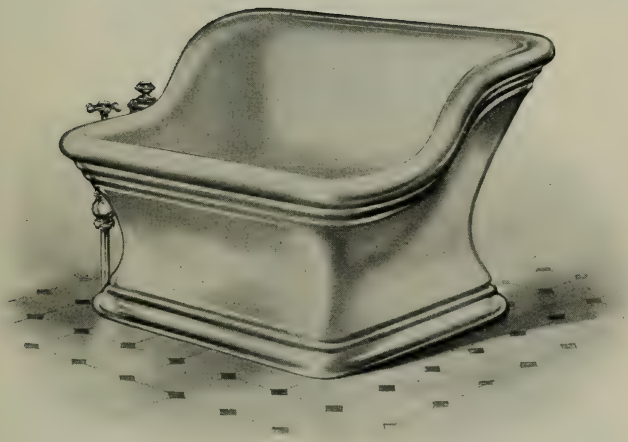
DIMENSIONS AND PRICES.

		4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Size of Tub,						
Length over Rim,	Inches	49	55	61	67	73
Width over Rim,	Inches	28½	28½	28½	28½	28½
Depth inside,	Inches	17½	17½	17½	17½	17½
Price, complete as described,		$46.00	$46.00	$49.00	$52.75	$57.25

*P-97 Hospital Bath furnished with Rim 3 inches wide, when so ordered, without extra charge.

CLOW AMERICAN PORCELAIN SITZ BATH.

GLAZED ALL OVER.



P-103.

American Porcelain Rolled Rim Sitz Bath, glazed all over; N. P. Ideal Waste and Overflow with China Center, Bell Supply Fittings with China Name Plates, and N. P. Supply Pipes.

DIMENSIONS.

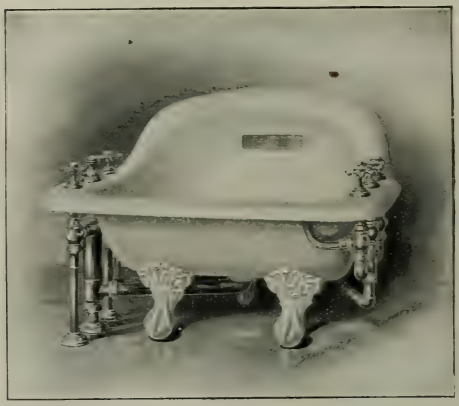
Length over Rim, 28 inches; length over all, 32 inches; width over Rim, 25 inches; height at front, 14½ inches; height at back, 21 inches.

PRICES.

	Class A	Class B
Complete as described,	$116.00	$90.00

CLOW PORCELAIN-LINED IRON SITZ BATH.

WHITE ENAMELED. ROLLED RIM.



P-105.

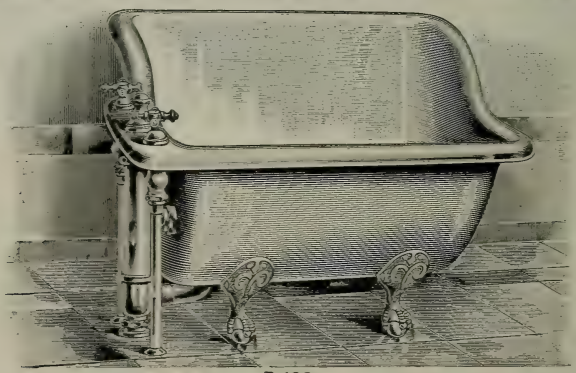
White Enameled Sitz Bath, with 3-inch Enameled Rolled Rim and Extension, Decorated Exterior, Ivory-white finish, Nickel Plated Combination Five-valve Bell Supply and Waste Fittings, Liver Spray, Bidet and Ideal Waste.

DIMENSIONS.

Width over rim, 31½ inches; front to back over rim, 31½ inches; height from floor to top of rim. front 15 inches, back 23 inches.

PRICES.

No. 1.	With Plain Exterior and Nickel Plated Fixtures, complete,	$ 99.50
No. 2.	With Decorated Exterior, Ivory-white, and Nickel Plated Fixtures, complete as shown,	109.50
No. 3.	With Decorated Exterior, Ivory-white with Gold Bands, and Nickel Plated Fixtures, complete,	111.50



P-106.

White Enameled Sitz Bath with 2½-inch Enameled Rolled Rim and Extension, Decorated Exterior, Ivory-white, finished Nickel Plated Ideal Waste and Overflow, Bell Supply Fittings and Supply Pipes.

DIMENSIONS.

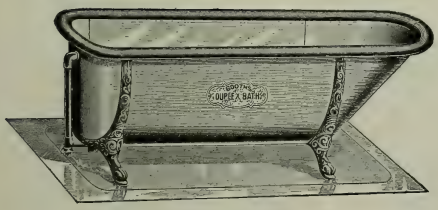
Width over rim, 30 inches; front to back over rim, 28 inches; height from floor to top of rim, front 15 inches, back 20 inches.

PRICES.

No. 1.	With Plain Exterior and Nickel Plated Fixtures, complete,	$42.50
No. 2.	With Decorated Exterior, Ivory-white, and Nickel Plated Fixtures, complete as shown,	52.50
No. 3.	With Decocated Exterior, Ivory-white with Gold Bands, and Nickel Plated Fixtures. complete,	54.50

DUPLEX COPPER AND ALL STEEL BATH TUBS.

WITH CONNECTED WASTE AND OVERFLOW.



P-134. DUPLEX.

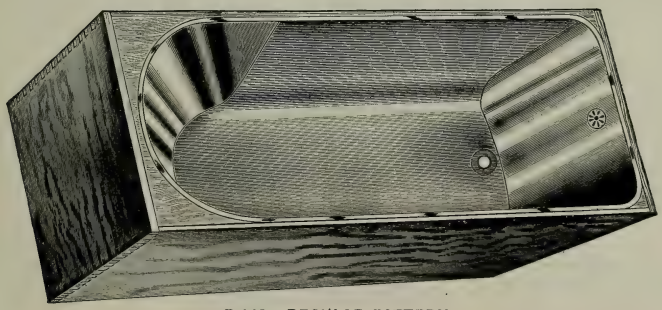


P-136. ALL STEEL.

SIZE	4½ ft.	5 ft.	5½ ft.	6 ft.
P-134. COPPER DEPOSIT (DUPLEX)	15.00	16.00	17.00	-----
P-136. ALL STEEL, ENAMEL PAINTED	19.50	20.50	21.50	24.50

These Tubs are enamel painted on the outside, with Standards outlined in gold.

COPPER AND ZINC BATH TUBS.



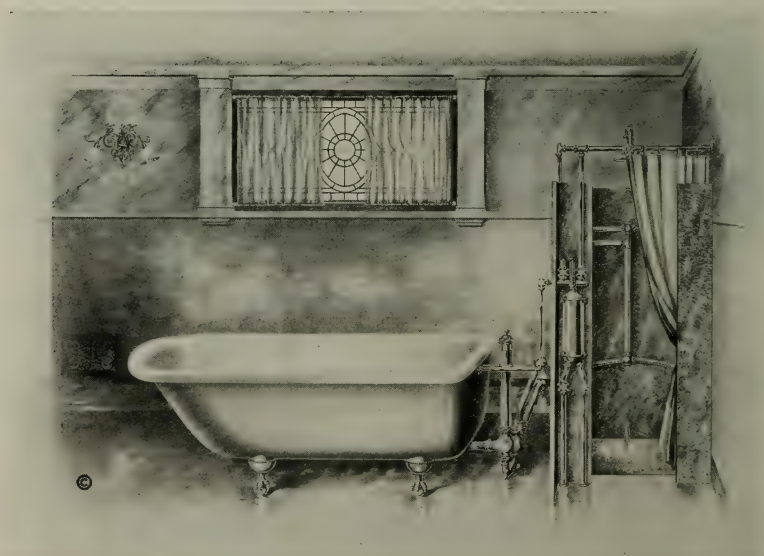
P-140. REGULAR PATTERN.

Outside width of Tubs at head and foot, 24 inches; outside depth of Tubs, 19 inches; outside length of Tubs, 4½, 5, 5½ and 6 feet.

Weight of Copper,	10 oz.	12 oz.	14 oz.
Price, each, any length as above,	$15.00	$16.00	$18.00

Zinc Tubs, 5, 5½, or 6 feet, $8.00 each.
Smaller size Bath Tubs to order, extra charge.
Larger size Bath Tubs to order, of Copper, 12 ounce and heavier.

CLOW HOSPITAL SHOWER AND BATH.



P-185.

Clow Combination Bath with Needle and Overhead Showers, N. P. Mixing Chamber with Thermometer, specially designed Iron Enameled Bath Tub, exterior finished with white enamel paint, N. P. Waste and Overflow, N. P. Special C Bath Trap with Drain Cock, Waste and Vent; Pink Tennessee Marble Stall with Receptor and countersunk Marble Base, Standing Overflow, N. P. Curtain Pole, Rings and Trimmings and Rubber Curtain.

DIMENSIONS.

Stall, size, 3 ft. x 3 ft.; height, 6 ft.; Outer partition, front to back, 4 feet; Pilasters, 8 inches wide; Width of Stall Door, 20 inches. Receptor, 6 inches deep with 1¼-inch Tennessee Marble Base. Curtain, 7 feet long and 2 feet wide. Tub, 6 feet or 6½ feet long, 30 inches wide outside; height from floor to top of Rim, 24 inches.

Price, complete as shown and described, - $366.00

The Clow Hospital Shower and Bath has been designed to meet the peculiar requirements of State and other Hospitals, and includes several unique and valuable improvements. The overhead Shower is supplied from the front and being mounted with ball and socket, can be adjusted to throw the water in any direction desired, preferably backward. This directing of the water *into* the Stall, instead of forward against the Curtain, allows the water to be thrown in an oblique direction without its splashing beyond the Stall upon the outer floor.

In accordance with the most scientific Shower construction, provision is made for the Foot Bath, the floor of the Stall being 6 inches below the floor of the bath room, forming a Receptor, the Standing Overflow allowing the water to rise to a depth of 5 inches. After bathing, the Overflow is raised, when the Receptor quickly empties itself.

Both the Shower and Bath are supplied from the Mixing Chamber, which is operated by an attendant, the temperature of the water being regulated by the thermometer. By opening the Bath Supply Valve, the temperature may be regulated before the Shower is started.

The Bath Tub used in this combination is of special design, being unusually wide and shallow and therefore very spacious. When patients are feeble or violent, two attendants are frequently necessary, one standing on each side of the Tub. To allow for this, the Tub is placed 15 inches from the wall.

CLOW ELECTRICAL BATH.



P-188.

White Enameled Bath with 3-inch Enameled Rolled Rim, Decorated Exterior, Ivory-white, finished Nickel Plated Ideal Waste and Overflow, Bell Supply Fittings with China Handles, Unions on Waste and Supplies, Marble Switch Board, 16 inches square, with Faradic Coil and two Vibrators, Graduated Automatic Rheotome, Graphite Rheostat, Milliamperemeter with Shunt, all necessary Switches, and four Movable Bath Tub Electrodes.

DIMENSIONS AND PRICES.

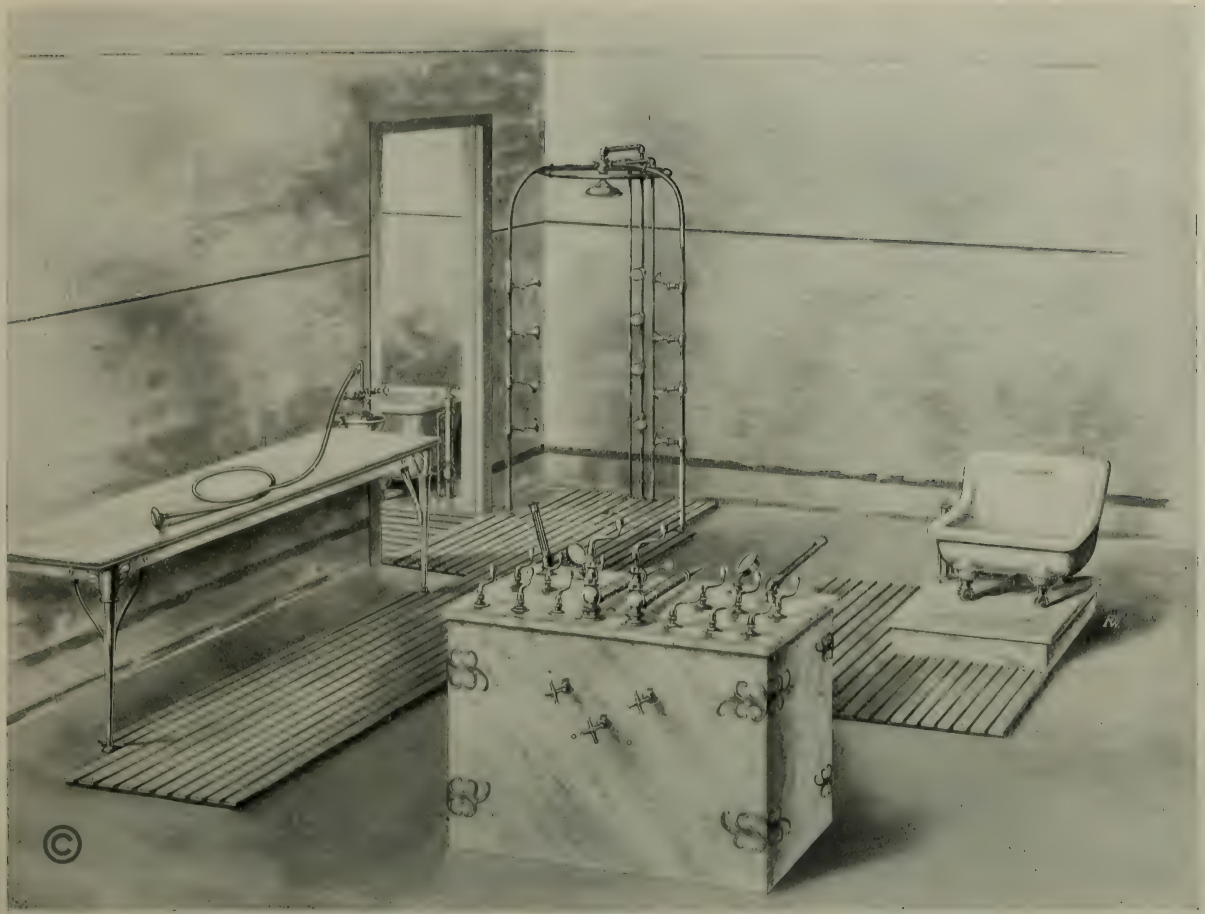
Length of Tub, 6 feet; width inside, 26 inches; depth inside, 17 inches; floor to top of Rim, 22½ inches.

Price, as described, ... $250.00

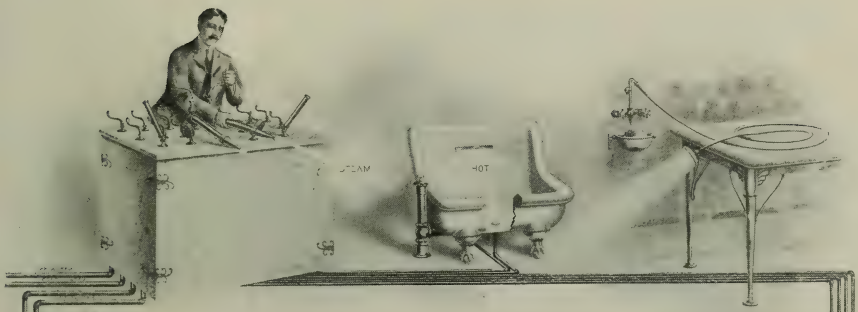
In ordering, state whether Switchboard is to be used with battery of cells or with a 110-volt direct lighting current.

The Switchboard is so arranged that the Automatic Rheotome is included in the Faradic Circuit, as well as the Galvanic, enabling the operator to get from 800 to 600 contractions per minute, an excellent massage application. The Faradic alone gives the slower interruptions. The Graphite Rheostat permits use with direct lighting current with perfect safety for Galvanic practice.

This outfit will be found complete and reliable for the most approved electro-therapeutical work,



P-192.



THE CLOW HYDROTHERAPEUTIC BATH, as shown in P-192, opposite page, is a combination of bath fixtures, all controlled from one operating table. The physician or operator, standing at the table, mixes the water to the desired temperature, as shown by a thermometer, adjusts the pressure, which is shown by a gauge, and operates the fixtures by means of the handles on top and on back of table.

Hot or cold, ice cold, and steam or vapor baths can be given at any or all of the fixtures, which can be equipped with as many attachments as desired, all operated from the table. The two Nozzles attached to top of table are for giving direct jets or applying the spinal spray to patients standing several feet away.

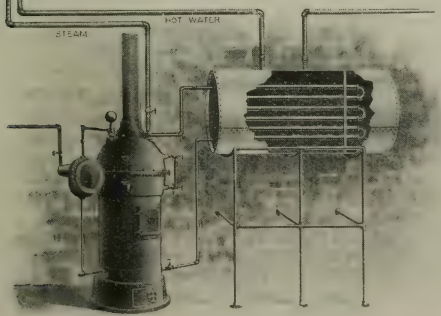
The cold water supply may be had from water main, the ice water from a tank, and the hot water and steam from a combined Steam Heater and Generator, as illustrated below.

Any combination of fixtures for Hospitals, Asylums, Sanitariums, etc., can be supplied. Special designs carefully executed. Plans submitted to suit requirements. Correspondence solicited.

Prices upon application.

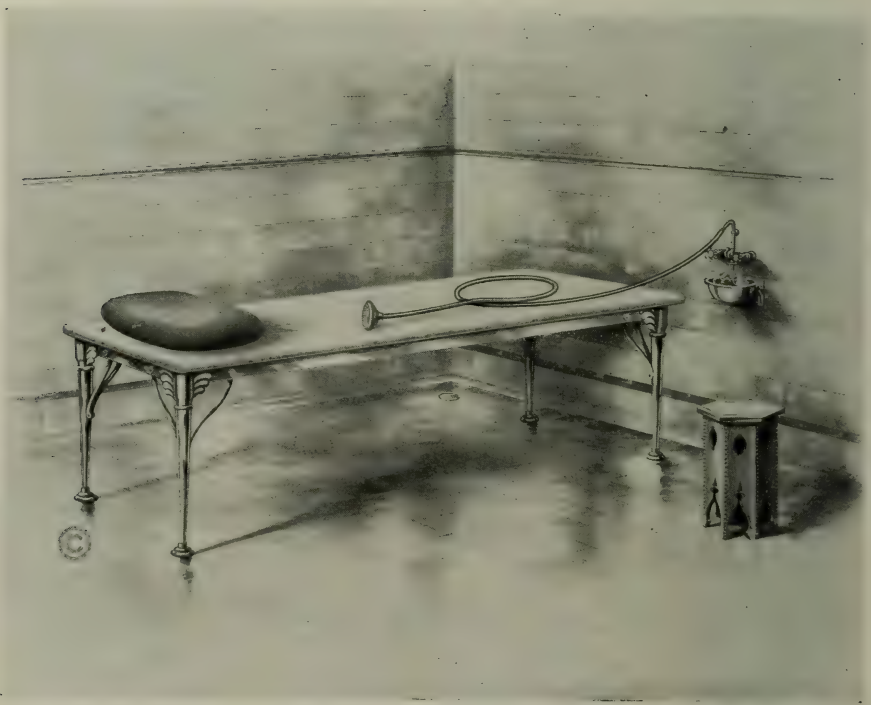








CLOW MASSAGE TABLES.



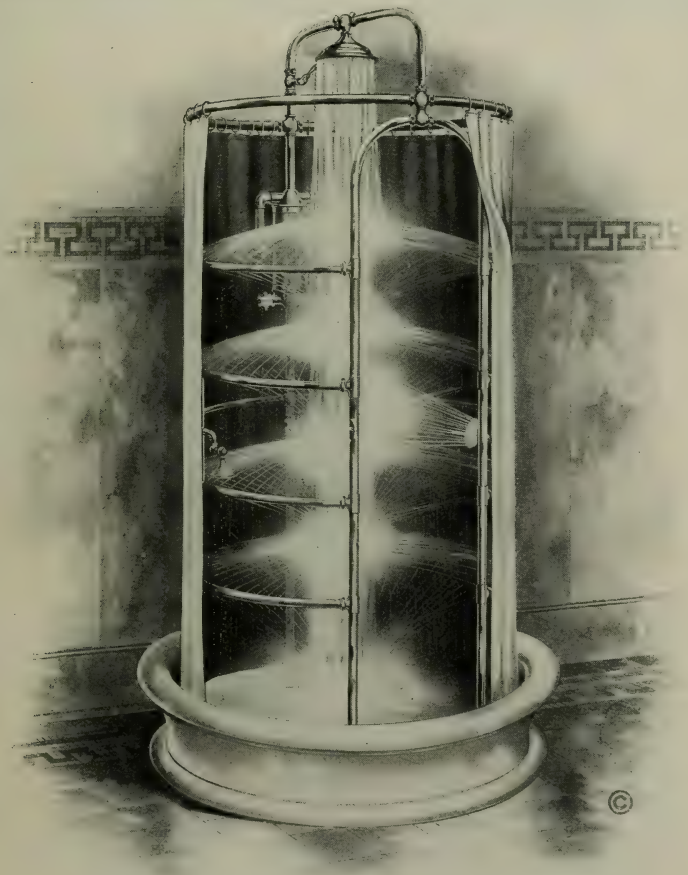
P-195.

Italian Marble Slab, 30 inches wide, 7 feet 6 inches long and 1¼ inches thick, supported on Nickel Plated Brass Frame and Legs, Rubber Air Pillow, Nickel Plated Combination Shampoo Cock, Rubber Hose and Sprinkler, and Nickel Plated Sponge Basin.

Complete, as described, ... $170.00

These Tables are of finest workmanship and are highly recommended for Hospitals. Asylums, Sanitariums, Athletic Clubs, etc.

CLOW COMBINATION NEEDLE SHOWER BATH WITH RECEPTOR.



P-198.

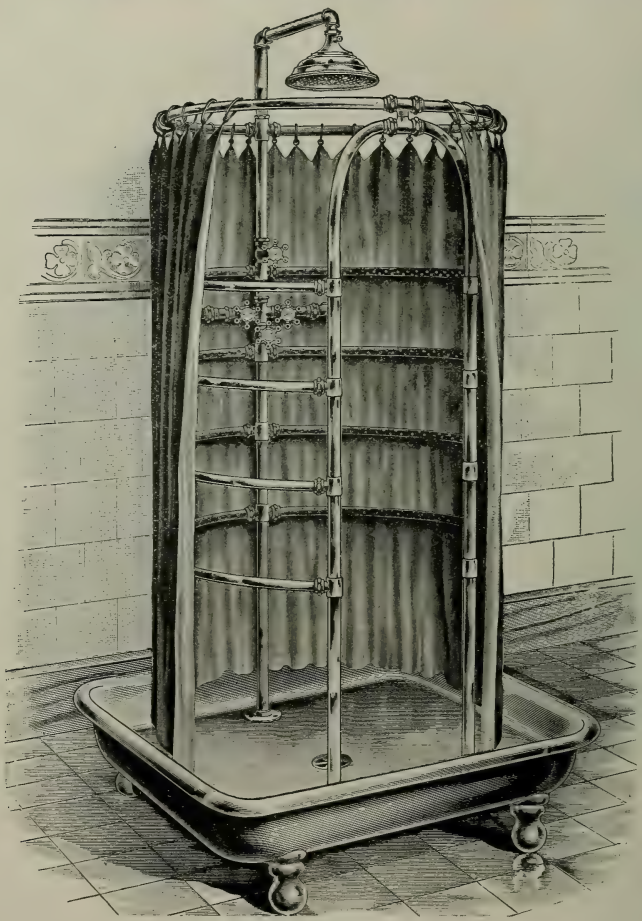
Nickel Plated Needle Shower Bath with Mixing Chamber and Thermometer, Adjustable Liver Spray with removable face, 1-inch hot and cold water Supplies, By-pass Valve for testing Temperature, specially designed Self-closing Valve with Chain and Ring, Rubber Curtain and American Porcelain Receptor glazed inside and outside, Strainer, Waste and Coupling.

DIMENSIONS.—Total height, 7 feet 6 inches; diameter of Needle Bath, 36 inches; diameter of Shower, 8 inches. Receptor, 36 inches inside diameter; depth, 6 inches.

Price, complete as described, - - - - - - - - - - - - - - - - - - $300.00

For successful operation of Needle Showers, the water pressure should not be less than 20 pounds. The piping should be as direct as possible. The Supplies should not only be large enough to give a free flow of water, but so arranged that the pressures of hot and cold water will be equal.

CLOW'S COMBINATION NEEDLE SHOWER BATH AND RECEPTOR.



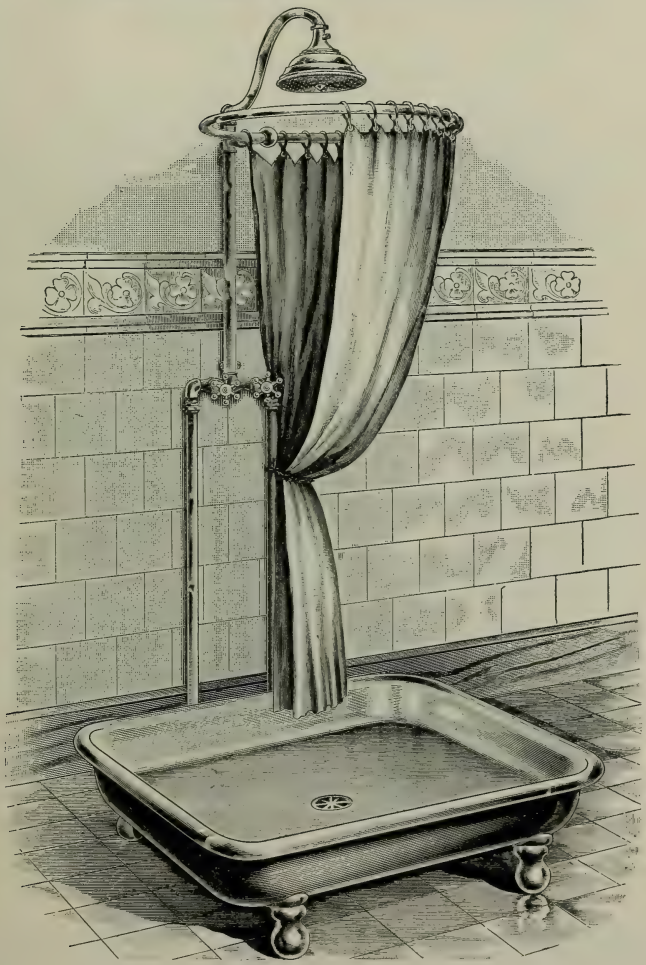
P-200.

Nickel Plated Combination Needle Shower Bath with Rubber Curtains, Enameled Iron Receptor, Nickel Plated Strainer, Waste and Coupling.

DIMENSIONS—Total height, 7 feet 10 inches; diameter of Needle Bath, 38 inches; diameter of Shower, 8 inches; Receptor, 42 inches square; height, 13¼ inches; depth, 6 inches.

Price, complete as described,	$169.25
If with zinc white finish outside, add	5.00

CLOW'S SHOWER BATH AND RECEPTOR.



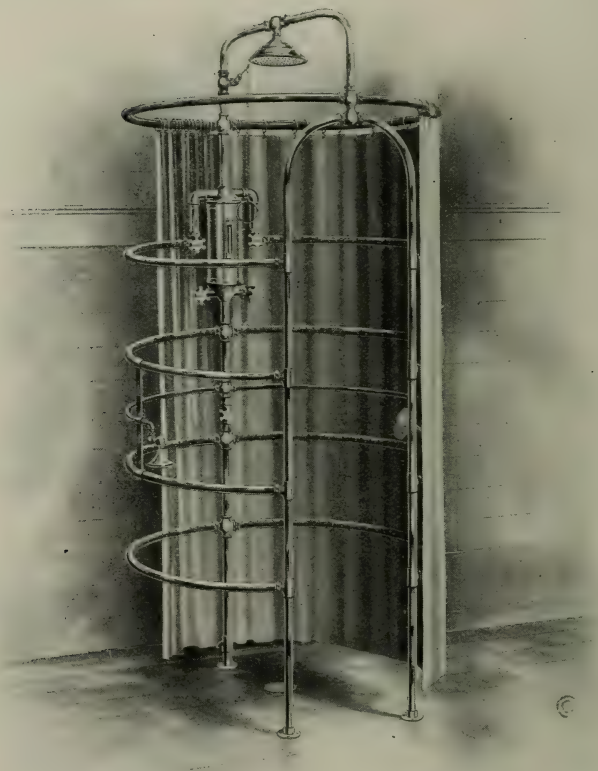
P-206.

Nickel Plated Shower Bath with Rubber Curtain, Enameled Iron Receptor, Nickel Plated Strainer, Waste and Coupling.

DIMENSIONS—Total height, 7 feet 6 inches; diameter of Ring, 25 inches; diameter of Shower, 8 inches. Receptor, height, 13½ inches; depth, 6 inches.

Price, complete with 36-inch Receptor,	$68.00
Price, complete with 42-inch Receptor,	76.00
If with zinc white finish outside, add	5.00

CLOW COMBINATION NEEDLE SHOWER BATH.



P-211.

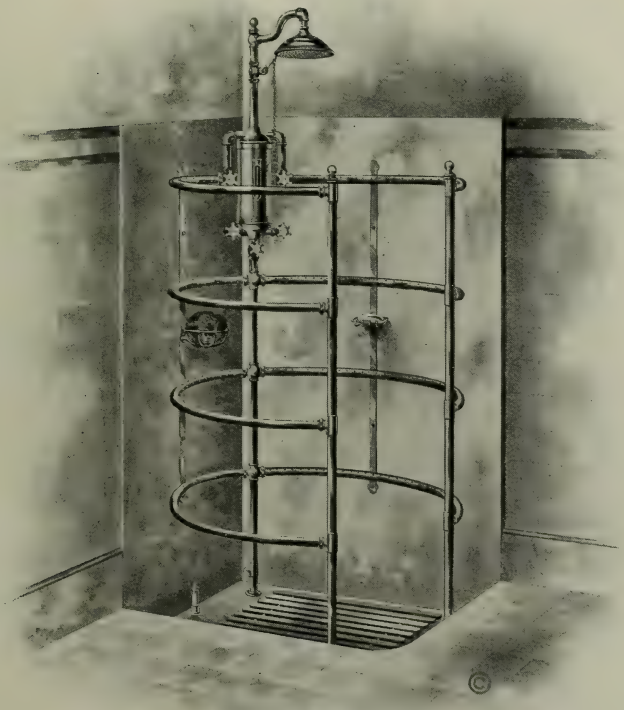
Nickel Plated Needle Shower Bath with Mixing Chamber and Thermometer, Adjustable Liver Spray with removable face, 1-inch hot and cold water Supplies, By-pass Valve for testing temperature, specially designed Self-closing Valve with Chain and Ring, Rubber Curtain and Clow Patent Floor Drain with N. P. Brass Top, Waste and Coupling.

DIMENSIONS—Total height, 7 feet 6 inches; diameter of Needle Bath, 36 inches; diameter of Shower, 8 inches.

Price, complete as described, - - - - - - - - - - - - - - - - - - $210.00

For successful operation of Needle Showers, the water pressure should not be less than 20 pounds. The piping should be as direct as possible. The Supplies should not only be large enough to give a free flow of water, but so arranged that the pressure of hot and cold water will be equal.

CLOW COMBINATION NEEDLE SHOWER BATH.



P-217.

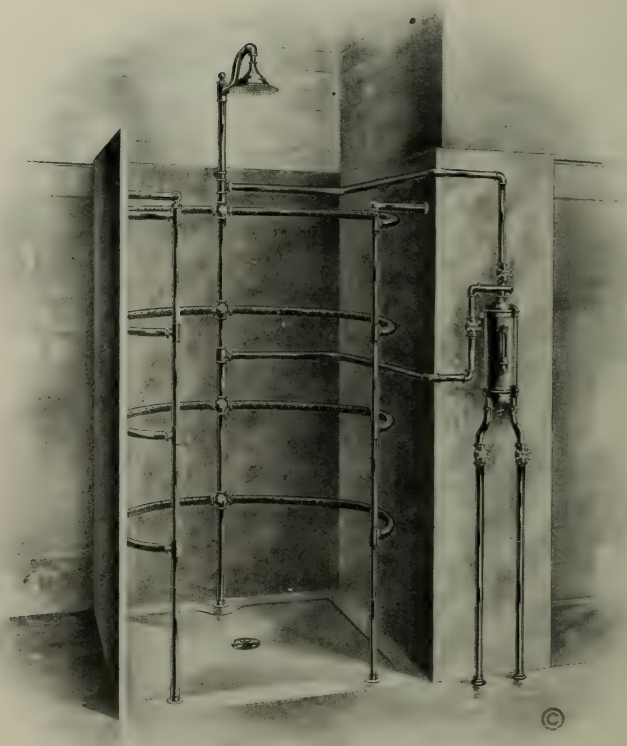
Nickel Plated Needle and Overhead Shower Bath with Inlet Air Valve and Removable Face, Mixing Chamber and Thermometer, 1-inch hot and cold water Supplies, By-pass Valve for testing Temperature, specially designed Self-closing Valve with Chain and Ring, N. P. Soap Cup and Sponge Holder, Tennessee Marble Receptor with Standing Overflow and Waste, Wood Mat and Marble side and back Splasher Slabs.

DIMENSIONS—Total height, 7 feet 6 inches; external diameter, 3 feet 2 inches; diameter of Shower Head, 8 inches: Receptor, 3 feet 2 inches x 3 feet 2 inches; depth inside, 6 inches: Wall Slabs, height, 6 feet; width, 3 feet 6 inches; thickness, ¾-inch.

Price, complete as shown and described, - - - - - - - - - - - - $228.00
Price, without Receptor, Overflow, Mat and Splasher Slabs, - - - - - - - - - - - 125.00

Italian Marble furnished, if preferred, at same price.

CLOW COMBINATION NEEDLE SHOWER BATH.



P-225.

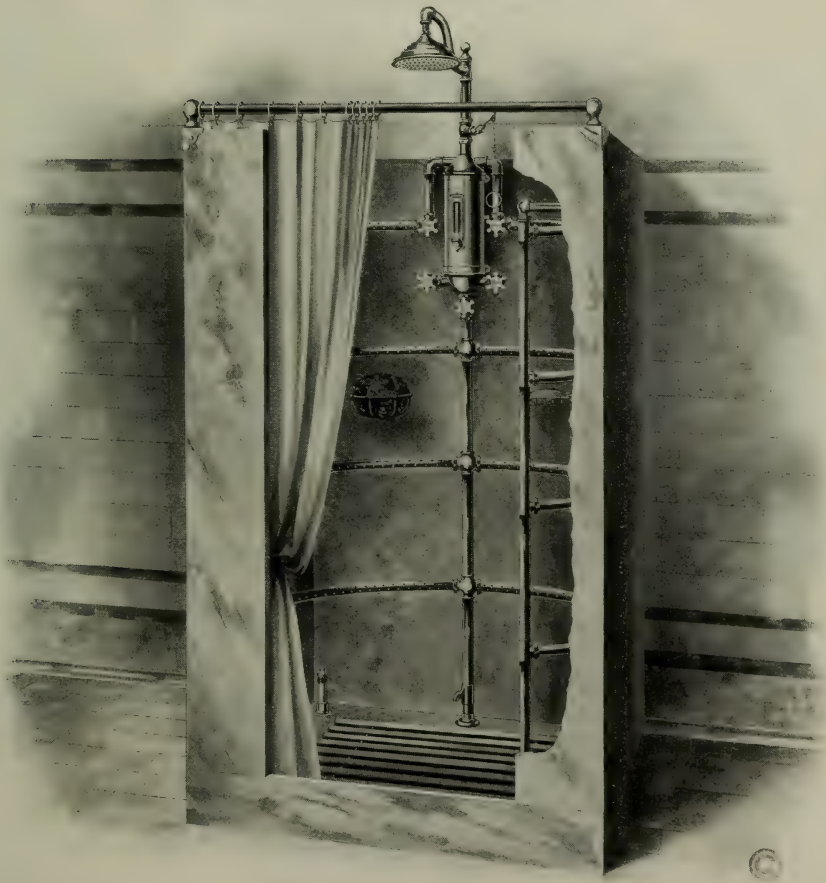
Nickel Plated Needle and Overhead Shower Bath with Inlet Air Valve and Removable Face, Mixing Chamber, Thermometer and 1-inch hot and cold water Supplies outside of Stall, Tennessee Marble Back, side Partitions, Stile for Mixer, Floor Slab graded to center, and Clow Patent Floor Drain with N. P. Brass Top, Waste and Coupling.

DIMENSIONS — Total height, 7 feet 6 inches; external diameter, 3 feet 2 inches; diameter of Shower Head, 8 inches: Back and Partitions, height, 6 feet 6 inches; width, 3 feet 2 inches; depth, 3 feet 2 inches; thickness of Slabs, $\frac{3}{4}$-inch: Stile, 15 inches wide: Floor Slab, 2 inches thick and countersunk one-half inch.

Price, complete as described and shown,	$220.00
If with Slate in place of Marble,	185.00
Combination Needle and Overhead Shower only,	125.00
If with White Canvas Curtains, N. P. Pole and Rings, as per P-229, add	15.00

Italian Marble furnished, if preferred, at same price.

CLOW COMBINATION NEEDLE SHOWER BATH.



P-229.

Nickel Plated Needle and Overhead Shower Bath with Inlet Air Valve and Removable Face, Mixing Chamber and Thermometer, 1-inch hot and cold water Supplies, By-pass Valve for testing Temperature, specially designed Self-closing Valve with Chain and Ring, N. P. Soap Cup and Sponge Holder, Tennessee Marble Stall, Rubber Curtain, N. P. Curtain Pole and special traverse Curtain Supports.

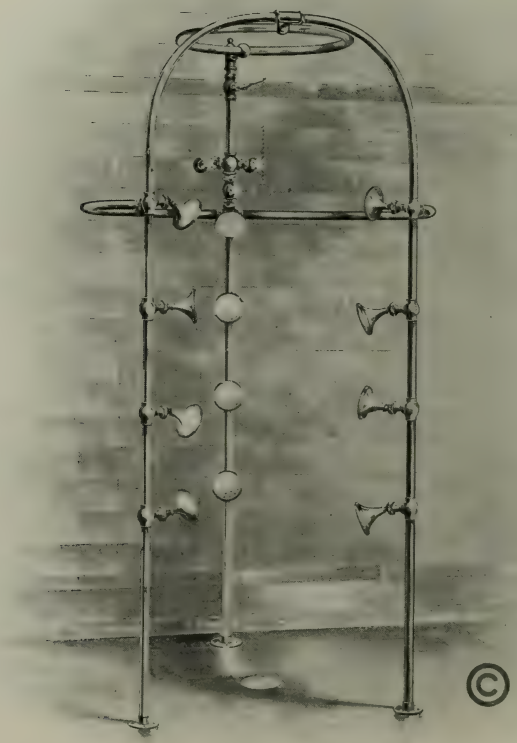
DIMENSIONS—Total height, 7 feet 6 inches; external diameter, 3 feet 2 inches; diameter of Shower Head, 8 inches: Stall, height, 6 feet 6 inches; interior, 3 feet 2 inches x 3 feet 2 inches; thickness of Slabs, ¾-inch; width of door, 26 inches; height of front Coping to form Receptor, 6 inches.

Price, complete as shown and described, ... $280.00

Italian Marble for Stall furnished at same price, if preferred.

CLOW COMBINATION SHOWER BATHS.

FOR HOSPITALS.



P-236

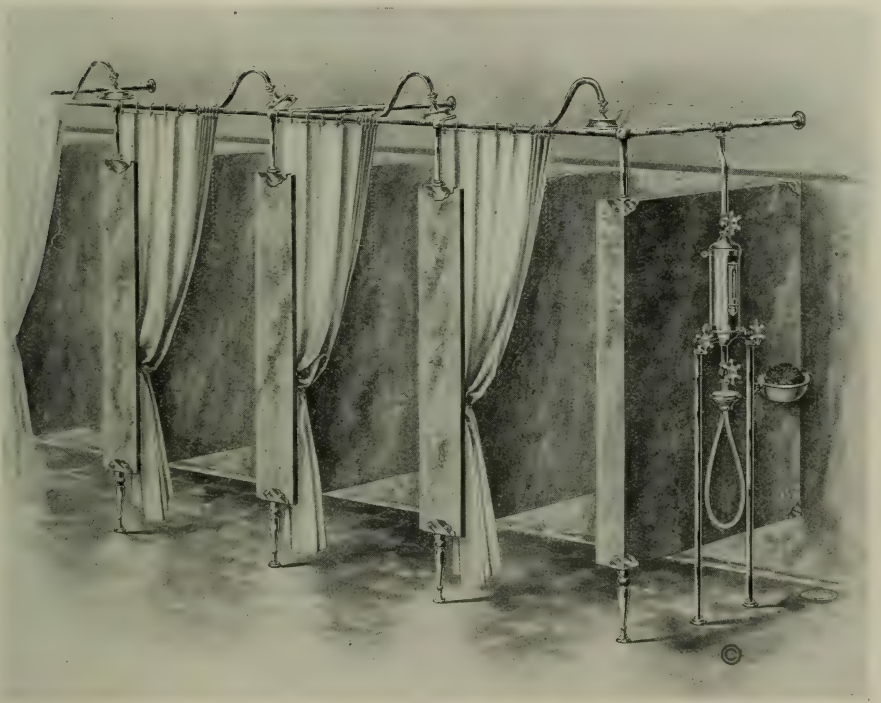
Nickel Plated Combination Needle Shower Bath, Overhead Ring Shower, Self-closing Valve, Chain and Ring, 12 Side Showers with Removable Faces and Adjustable Ball Joints, Strainer, Waste and Coupling.

Price, complete as described, ... $142.00

Marble Base, extra; prices upon application.

DIMENSIONS.—Total height, 7 feet 6 inches; diameter of shower, 8 inches; diameter of ring, 35 x 40 inches; diameter of side showers, 4 inches.

CLOW RANGE HOSPITAL SHOWER.



P-240.

Nickel Plated Overhead Shower with Inlet Air Valve and Removable Face, Adjustable Ball Joint, specially designed Self-closing Valve with Chain and Ring, 1-inch combination Supply and Curtain Pole, Mixing Chamber and Thermometer, Shampoo, ¾-inch hot and cold water Supplies, N. P. Sponge Basin, Clow Combination Floor Drain and Trap with 2-inch outlet, Tennessee Marble Stall with N. P. adjustable Legs, Top Standards, Stirrups and Wall Plates, white Canvas Curtain and special traverse Curtain Supports.

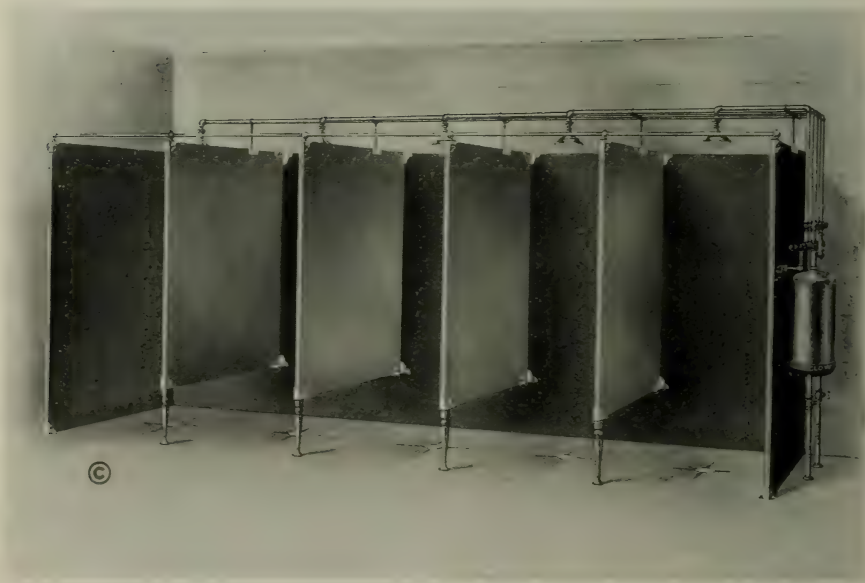
DIMENSIONS — Total height, 7 feet 6 inches; diameter of Shower Head, 5 inches: Stall, height of Back, 6 feet 6 inches; height of Partition, 5 feet 6 inches; height of Legs, 12 inches; height of Top Standards, 10 inches; interior of Stall, 3 feet 2 inches x 3 feet 2 inches; width of end Stile, 6 inches; width of center Stiles, 12 inches; thickness of Slabs, ⅞-inch; width of Door, 26 inches: Supply Pipes, center to center, 7 inches.

Price per single Stall, complete as described,	$190.00
For each additional Stall, add	100.00

Italian Marble furnished, if preferred, at same price.

When more than three Showers are desired, a larger Mixing Chamber will be necessary. This will add proportionately to the cost according to the number of Showers added. Prices upon application.

CLOW RANGE SHOWER BATH.



P-243.

Range Shower consisting of five N. P. Showers with Inlet Air Valves, Removable Faces and Adjustable Ball Joints, 1¼-inch Galvanized Iron hot and cold water Supplies, half-inch Supplies to Showers, Pipe Supports, Galvanized Iron Mixing Chamber with Thermometer, N. P. Valves for Supplies, Test and Showers, five Slate Stalls with end Slabs to floor and center Slabs supported on N. P. Adjustable Legs, N. P. Clamps and Stirrups, Rail with Top Standards and five N. P. Clow Combination Floor Drains and Traps with 2-inch Outlets.

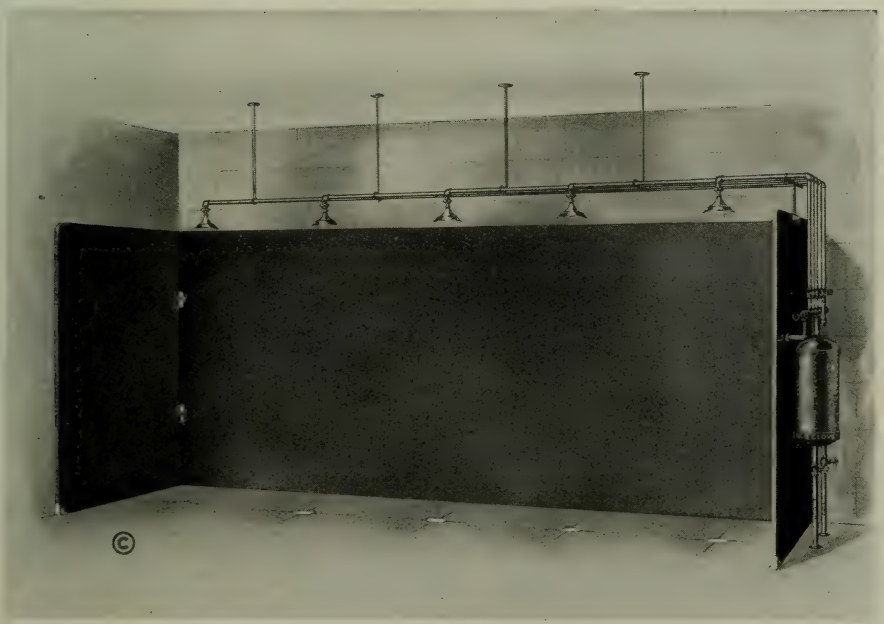
Price, complete as described and shown,	$312.00
For each single Shower and Stall, add or deduct	55.00

DIMENSIONS — Total height, 7 feet 9 inches; total length, 16 feet 6 inches; diameter of Shower Heads, 5 inches: Mixing Chamber, length, 24 inches; diameter, 8 inches: Stalls, 3 feet x 3 feet; height of Backs and Partitions to Floor, 6 feet 6 inches; height of partitions on legs, 5 feet 6 inches; height of Legs, 12 inches; thickness of Slabs, ⅞-inch.

When more than ten Showers are desired, a larger Mixing Chamber will be necessary. Prices for combinations other than the one illustrated, or for Marble Slabs, given upon application.

The Supply Pipes should not only be large enough to give a free flow of water, but so arranged that the pressure of hot and cold water will be equal.

CLOW RANGE SHOWER BATH.



P-244.

Range Shower consisting of five N. P. Showers with inlet Air Valves, Removable Faces and Adjustable Ball Joints, 1¼-inch Galvanized Iron hot and cold water Supplies and half-inch distributing Pipes to Showers, Pipe Holders less Rod, Pipe Support, Galvanized Iron Mixing Chamber with Thermometer and Test, N. P. Valves for Supplies, Test and Showers, Slate Back and End Slabs, N. P. Clamps and Stirrups, and five N. P. Clow Combination Floor Drains and Traps with 2-inch Outlets.

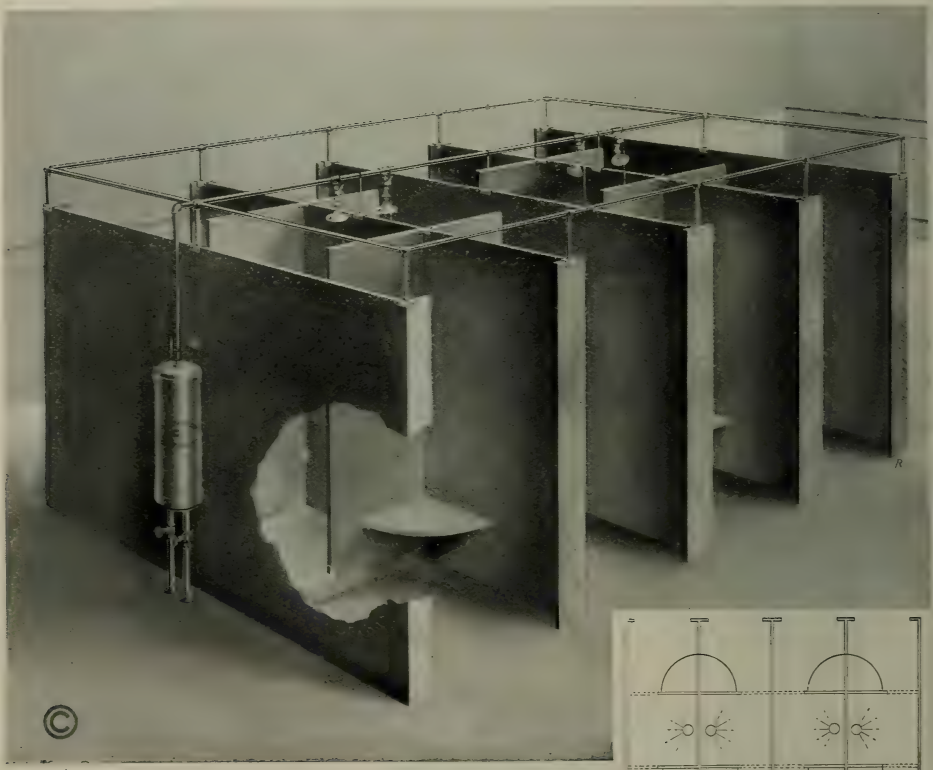
Price, complete as described and shown,	$235.00
For each single Shower, add or deduct	32.00

DIMENSIONS — Total height, 7 feet 9 inches; total length, 16 feet 6 inches; diameter of Shower Heads, 5 inches; from center to center of Showers, 3 feet: Mixing Chamber, length, 24 inches; diameter, 8 inches: height of back and end Slabs, 6 feet 6 inches; depth of end Slabs, 3 feet; thickness of Slabs, ⅞-inch.

When more than ten Showers are desired, a larger Mixing Chamber will be necessary. Prices for combinations other than the one illustrated, or for Marble Slabs, given upon application. These Showers can be arranged in separate Stalls or rooms, if desired, the temperature of all being controlled by one Mixing Chamber.

The Supply Pipes should not only be large enough to give a free flow of water, but so arranged that the pressure of hot and cold water will be equal.

CLOW RANGE SHOWER BATHS.



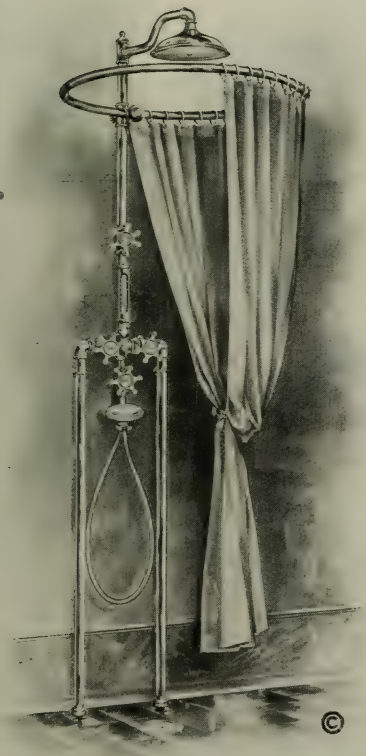
P-245.

Combination Slate Showers and Dressing Rooms with Slate Seats, Nickel Plated Supports, Clamps, Angles, Top Standards and Railing, Clow Patented Galvanized Iron Mixing Chamber with Thermometer, Nickel Plated Valves and Supplies, Nickel Plated 5-inch Showers with Removable Faces, Adjustable Ball Joints, Patented Self-Closing Cocks with Rod and Ring Pull, Clow 9-inch Combination Floor Drain and Trap as shown on page 602.

Plans, dimensions and prices upon application.

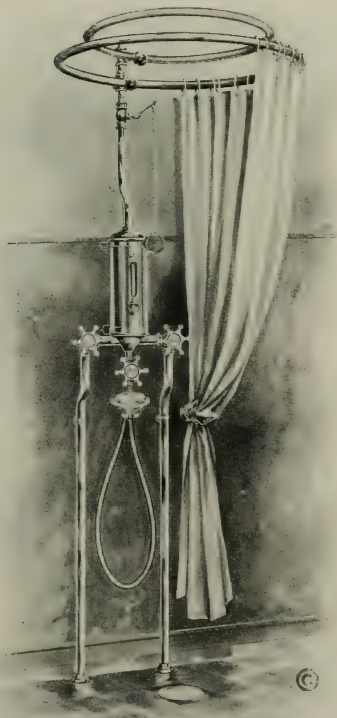
The arrangement of this Shower with two Dressing Rooms for each Shower Room doubles its capacity and is a great saving in expense of construction. While the occupant of one Dressing Room is using the Shower, the occupant of the other Dressing Room may be undressing and all ready to take the Shower as soon as the first has finished, and so on. Thus no time is lost in waiting for Bathers to dress, and the Showers may be kept in almost constant operation.

CLOW SHOWER BATHS.



P-247.

Nickel Plated Shower and Shampoo with Rubber Curtain, N. P. Thermometer, Clow Patent Floor Drain with N. P. Brass Top, Waste and Coupling, - - - - - - - - $46.00



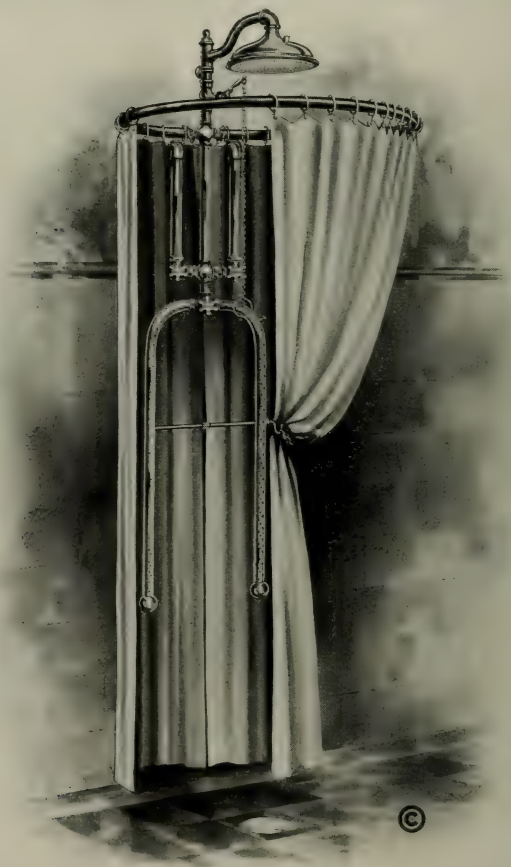
P-250.

Nickel Plated Ring Shower and Shampoo with Rubber Curtain, N. P. Mixing Chamber and Thermometer, specially designed Self-closing Valve, Chain and Ring, Clow Patent Floor Drain with N. P. Brass Top, Waste and Coupling, - $56.00

DIMENSIONS—Total height, 7 feet 6 inches; distance from wall to center of Shower, 20 inches; diameter of Shower, 6½ inches; diameter of Shower Ring, 20 inches; diameter of Curtain Ring, 24 inches.

When specified for use over end of Bath Tub, these Showers will be furnished 24 inches from wall to center of Shower.

CLOW COMBINATION NEEDLE SHOWER BATH.



P-251.

Nickel Plated Combination Needle and Overhead Shower Bath with Inlet Air Valve, ½-inch hot and cold water Supplies, specially designed Self-closing Valve with Chain and Ring, Curtain Ring, Rubber Curtain and special traverse Curtain Supports.

DIMENSIONS—Diameter of Ring, 24 inches; diameter of Shower, 6½ inches; distance from wall to center of Shower, 21 inches. When specified for use over end of Bath Tub, this Shower will be furnished 24 inches from wall to center of Shower.

Price, complete as described, ... $48.00
If with Clow Combination Floor Drain and Trap, with 2-inch outlet, add 8.20

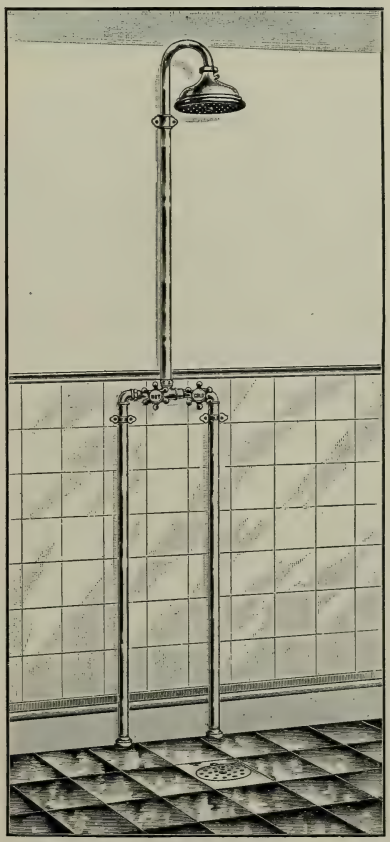
This Shower is so arranged that the Curtain, which is furnished in two parts, can be hung without any pipes running through it. As here arranged, it meets perfectly behind the Shower, protecting the wall from water, and can readily be taken down by unhooking from Curtain Rings. The Supplies should not only be large enough to give free water flow, but so arranged that pressures of hot and cold water will be equal.

CLOW'S SHOWER BATHS.



P-255.

Nickel Plated Plain Shower with Inlet Air Valve, and Ring with Rubber Curtain, - - - - $32.50
If with Nickel Plated Floor Drain, add - - - 3.00



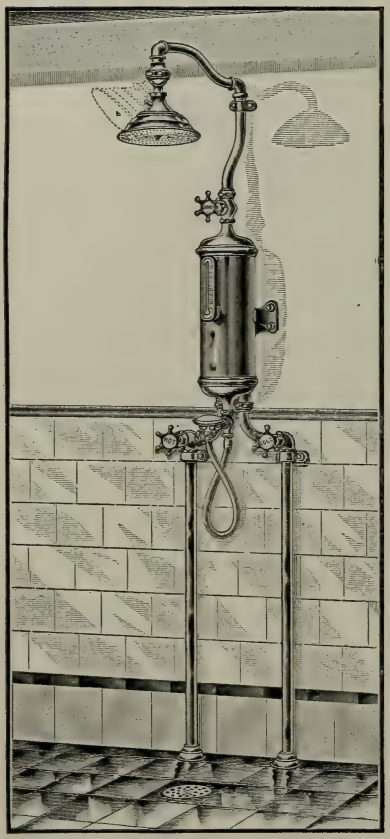
P-261.

Nickel Plated Plain Shower, with Inlet Air Valve, Supply Pipes and Valves, - - - - - - - $18.00
If with Nickel Plated Floor Drain, add - - - 3.00

Marble Base, 30×26 inches, countersunk ½-inch deep, extra - - - - - - - - - - - - - - - - - 10.00

DIMENSIONS—Total height, 7 feet 6 inches; distance from wall to center of shower, 18 inches; diameter of shower, 8 inches; diameter of curtain ring, 25 inches.

CLOW'S SHOWER BATHS.



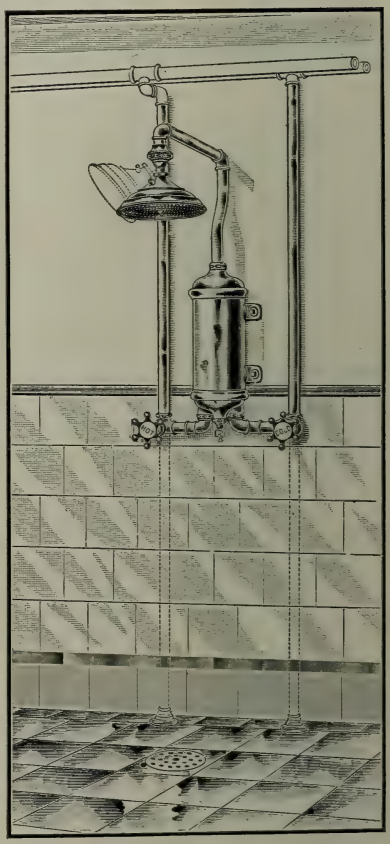
P-267.

Nickel Plated Shower with Inlet Air Valve and Removable Face, Adjustable Ball Joint, Mixing Chamber, Thermometer, Shampoo, Strainer, Waste and Coupling, - - - - - - - - $41.00

If with Galvanized Iron Mixing Chamber and Supply Pipes, deduct - - - - - - - - 8.00

If without Shampoo, deduct - - - - - - - 5.00

DIMENSIONS—Total height, 7 feet 6 inches; diameter of shower, 5 inches.



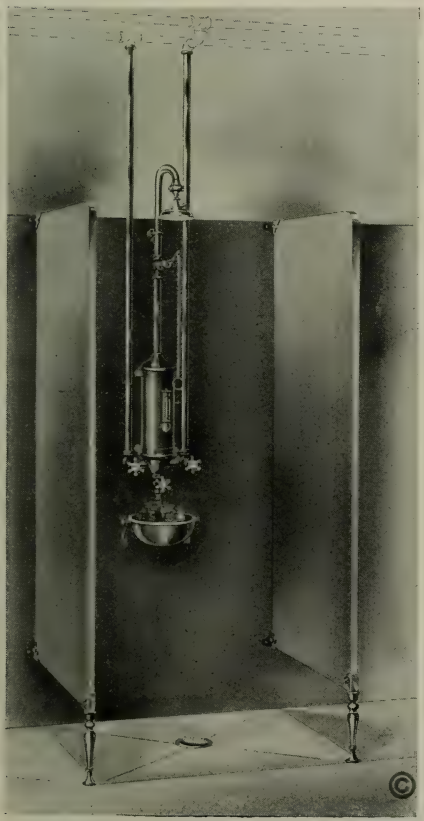
P-273.

Nickel Plated Shower with Inlet Air Valve and Removable Face, Adjustable Ball Joint, Mixing Chamber, Supply Pipes to Main Supply above, Strainer, Waste and Coupling, - - - - - - $28.00

If with Galvanized Iron Mixing Chamber and Supply Pipes, deduct - - - - - - - - 8.00

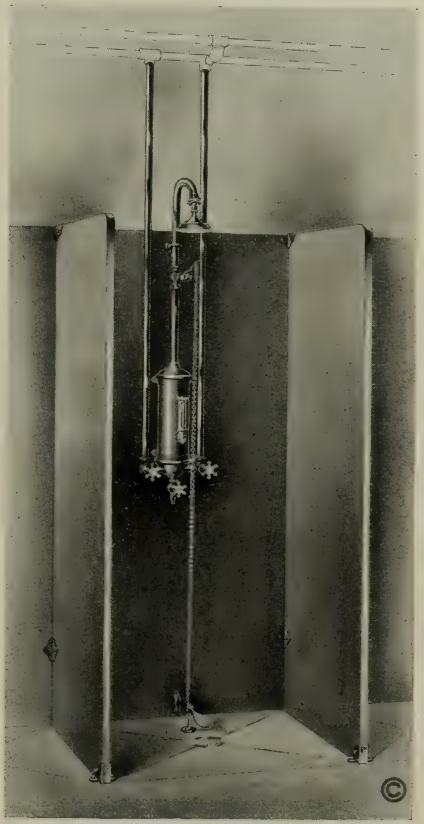
DIMENSIONS—Diameter of shower, 5 inches; distance from supply valves to top of supply pipes, 3 feet 6 inches. Supply pipes to floor if preferred.

CLOW BARRACK SHOWER BATHS.



P-275.

Nickel Plated Shower with Inlet Air Valve and Removable Face, Adjustable Ball Joint, specially designed Self-closing Valve with Chain and Ring, Mixing Chamber with Testing Valve, Thermometer, half-inch hot and cold water Supplies, N. P. Sponge Basin, Clow N. P. Combination Floor Drain and Trap with 2-inch Outlet, Slate Stall with N. P. Stirrups and Adjustable Legs.



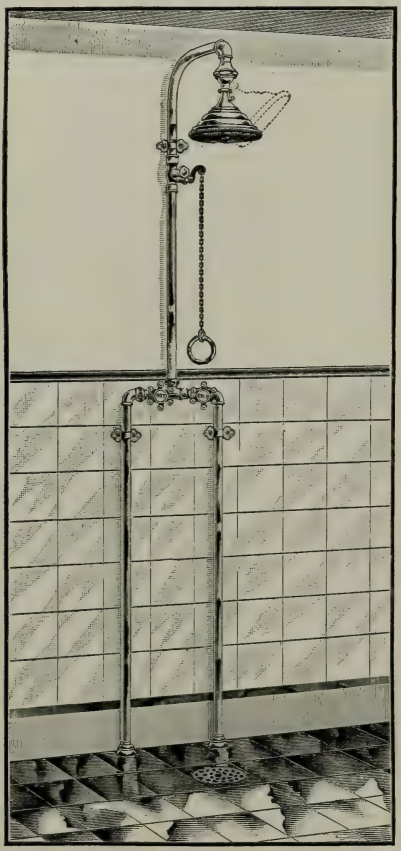
P-277.

Nickel Plated Shower with Inlet Air Valve and Removable Face, Adjustable Ball Joint, specially designed Self-closing Valve with Chain and Pedal, Mixing Chamber with Testing Valve, Thermometer, half-inch hot and cold water Supplies, Clow N. P. Combination Floor Drain and Trap with 2-inch Outlet, Slate Stall with N. P. Stirrups and Angle Clamps.

DIMENSIONS — Total height of Shower, 7 feet 6 inches; diameter of Shower Head, 5 inches: Stall, height of Back, 6 feet 7 inches; height of Partitions on Legs, 5 feet 7 inches; height of Legs, 12 inches; height of Partitions to floor, 6 feet 7 inches; interior of Stalls, width, 3 feet 2 inches; depth, 3 feet 6 inches; thickness of Slabs, $\frac{1}{2}$-inch: Supplies, center to center, 7 inches.

Price, complete as described, P-275 or P-277,	$108.00
For each additional Shower and Stall, add	100.00
If with N. P. Top Rail and Standards as shown in P-243, add, per Stall,	6.00

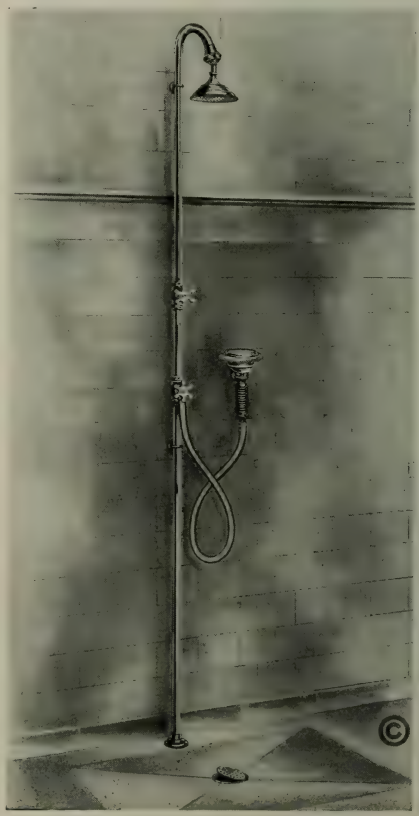
CLOW SHOWER BATHS.



P-279.

Nickel Plated Shower with Inlet Air Valve and Removable Face, Adjustable Ball Joint, Self-closing Valve, Chain and Ring, - - - - - $21.00

If with Clow N. P. Floor Drain and Trap, add - 3.00



P-284.

Nickel Plated Shower, for cold water only, Removable Face and Adjustable Ball Joint, Shampoo with Rosewood Handle and 5 feet of Rubber Hose, - - - - - - - - - - $18.00

If with Clow N. P. Floor Drain and Trap, add - 8.20

DIMENSIONS—Total height, 7 feet 6 inches; distance from wall to center of shower, 18 inches; diameter of shower, 5 inches; diameter of Shampoo, 4 inches.

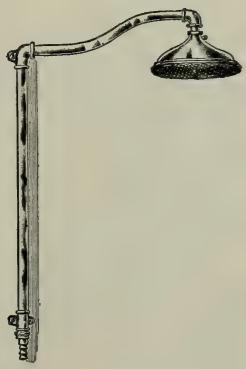
The Clow Cold Water Shampoo and Shower, P-284, is used extensively for Athletic Clubs and Grounds, Tropical Countries, etc.



P-291.

Nickel Plated Shower with Supply Pipe and Curtain Ring, ... $15.00
If with Rubber Curtain, add 6.00

Diameter of shower, 6½ inches; diameter of curtain ring, 25 inches.



P-293.

Nickel Plated Shower with Supply Pipe, . . . $8.00

Diameter of shower, 6½ inches.



P-294.

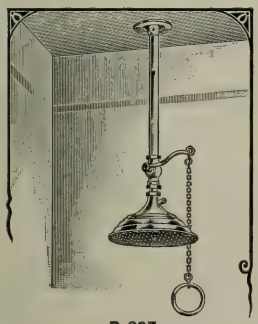
N. P. Brass Rod, with Flanges and Rings, per foot . $1.00



P-295.

Nickel Plated Ring Shower, ... $6.00

Diameter, 20 inches. Inlet for ½-inch iron pipe.



P-297.

Nickel Plated Shower with Inlet Air Valve and Removable Face, self-closing Valve, Chain and Ring, ... $11 00

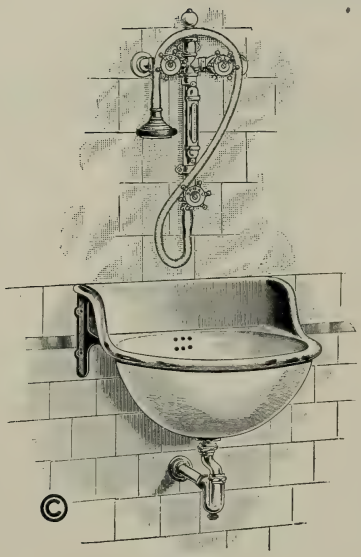
DIMENSIONS—Distance from ceiling to bottom of shower, 20 inches; diameter of shower, 6½ inches.



P-299.

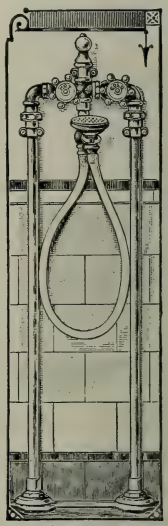
Nickel Plated Shower with Inlet Air Valve and Removable Face, self-closing Valve, Chain and Ring, ... $11.00

DIMENSIONS—Distance from wall to center of shower, 18 inches; diameter of shower, 6½ inches.



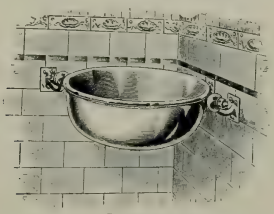
P-301.

Shampoo with Thermometer, Enameled Iron Basin and Trap, complete, ... $20.00
If without Thermometer, ... 16.00
Shampoo only, without Thermometer or Basin, . 10.00
Diameter of basin, 12 inches; length of back, 13½ inches.



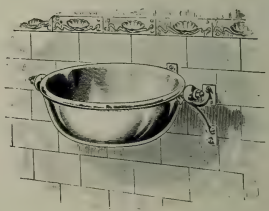
P-305.

Shampoo, with Hose and Sprinkler, ¾-inch Supply to Floor, Nickel Plated, ... $14.00



P-307.

Nickel Plated Copper Tilting Basin for corner, with Brackets and Stop, Complete, ... $7.00
Diameter, 11 inches; depth, 5 inches.



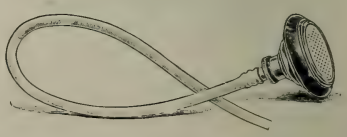
P-309.

Nickel Plated Copper Tilting Basin for straight wall, with Brackets and Stop, Complete, . $7.00
Diameter, 11 inches; depth, 5 inches.



P-312.

Shower Ring, with Hose, Nickel Plated, Each, . $2.00



P-314.

Nickel Plated Shampoo (3¼-in.), with Rubber Ring and 4 Feet of Tubing, Each, ... $1.25



P-322.



P-325.

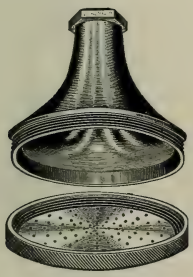
Nickel Plated Shower Head; diameter, 7¼ inches; ⅜-inch inlet.
Each - - - - $1.25



P-327. WITH REMOVABLE FACE.

NICKEL PLATED SHOWER HEADS WITH AIR VALVE.

DIAMETER . . . . . INCHES	4	5	6½	8	10	12
SIZE OF INLET . . . . . INCHES	⅜	½	½	¾	1	1
P-322 . . . . . EACH	1.25	1.65	2.00	2.35	3.25	4.50
P-327 . . . . . EACH	----	2.50	3.00	3.25	4.75	5.75



P-330.

Nickel Plated Brass Shower; diameter 4 inches; ½-inch inlet - each, $1.75



P-332.

Tinned Copper Plain Shower Head; ½-inch inlet - - each, $1.10



P-334.

Tinned Copper Tubular Shower Head; ¾-inch inlet - - each, $2.75



P-337.

Nickel Plated Shampoo with rubber ring and detachable shank.

Size -	2½	3½	4	5
Each -	$0.40	$1.10	$1.85	$2.45



P-339.

Nickel Plated Shampoo with rubber ring.

Size - -	Inches	2½	3½
Each - - -		$0.30	$0.60

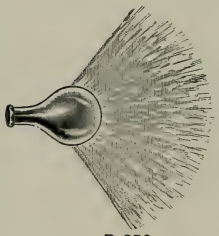


P-341.

Nickel Plated Shampoo, 2¼ inches in diameter.
Each - - - - $0.20



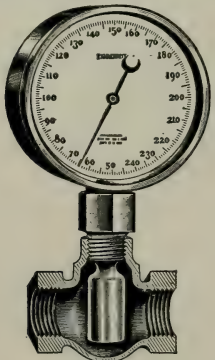
P-348.
Nickel Plated Shampoo Sprinkler, with rosewood handle and rubber ring.
Diameter 2½ in., each, $1.25
Diameter 3½ in., each, 1.85



P-350.
Nickel Plated Spinal Spray, each, - - - - $5.00



P-352.
Nickel Plated Ball Joint ½-inch Connection, with 6½-inch Shower Head, each, - - - - - - $5.50



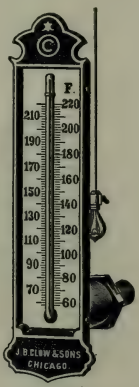
*P-354.
Hot Water Dial Thermometer, White Enameled, 4-inch Dial, Nickel Plated, Brass Case - $6.50
Special Tee Connections, Extra.



P-356.
Straight Shower Thermometer, Nickel Plated, each, $3.50



P-358.
Angle Shower Thermometer, Nickel Plated, each, - - - $3.50



P 360.
Illuminated Thermometer with translucent glass face, Nickel Plated, each, - - $5.00

*We recommend the use of this special Tee. It allows free circulation of water around the lamina, insuring great accuracy in the instrument.





CLOW
SPECIAL

P-365. COMBINED FLOOR DRAIN AND TRAP.

Size of Inlet	Inches	2	3	4
Diam. of Top	Inches	9	11	13
Depth	Inches	8	11	13
With Finished Brass Top and Strainer	Each	7.75	9.00	11.25
With N. P. Brass Top and Strainer	Each	8.25	10.00	12.25

P-367. FLOOR DRAIN AND TRAP, WITH SOLID COVER.

Size of Inlet	Inches	2	3	4
Diam. of Top	Inches	9	11	13
Depth	Inches	8	11	13
With Finished Brass Top, Strainer and Cover	Each	10.25	13.50	18.25
With N. P. Brass Top, Strainer and Cover	Each	10.75	14.50	19.25

NOTE.—Drains with 2-inch Outlet are all Brass; larger sizes have Iron Body.

CLOW AMERICAN PORCELAIN

AMERICAN PORCELAIN is the name given to the ware of which Clow's solid Porcelain Sanitary Fixtures are made. This name supersedes that of Royal Porcelain, which has hitherto designated Clow Porcelain Specialties.

Clow Porcelain is distinctively an American ware and as such has not only won its high reputation, but being vastly superior to the Porcelain goods of European as well as other makes, it is preferred both in America and in foreign countries. American products have rapidly come to the front in the last two decades, and American manufacturers do not need to instill the suggestion of foreign make or quality in order to sell their goods. It is the American product that is sought, the American product which now makes the pace for the manufacturing world, and it is American Porcelain which leads in the world of Sanitary Appliances.

Because of its cleanliness, Porcelain for Sanitary Fixtures was long since recognized as the ideal ware. Even for the clumsy, ungainly fixtures of English make, there was an insatiable demand in this country until the production of American Porcelain, which is now the requirement of both American and European markets.

The clay as prepared in this country, and our firing of it, is far superior to the English methods, while our facilities for molding and handling it enable us to execute any design in any shape or size. The result is the production of Fixtures not only surpassing the English in quality, but altogether graceful, artistic and pleasing to the eye, an improvement recognized by the English themselves, as the popularity of American Porcelain in their country amply demonstrates.

Even where expense must be considered, Clow American Porcelain is always the best economy on account of the enduring qualities of the ware and the hygienic principles upon which the fixtures are constructed. American Porcelain fixtures, well set up, will outlast any man and never grow old. Ordinary care will keep them always fresh in appearance. There is no greater auxiliary to good health and genuine comfort than modern Plumbing fixtures, which, on the other hand, constantly menace health unless they meet, in every respect, the conditions which modern scientific investigation has set as the standard.

On account of its being absolutely non-absorbent, American Porcelain always retains its glistering whiteness, never becoming discolored from the infiltration of alkalies and water, as the marble slab, unless of the finest and therefore expensive grades, is almost sure to do. All parts of American Porcelain Fixtures can easily be kept scrupulously clean, which largely accounts for the supreme popularity of this ware among physicians and for hospital use. The ware itself will not craze, while the highly vitreous surface can be kept as attractive as the daintiest china. This vitreous surface, moreover, combines with the beautiful cream white tints of the Porcelain to yield, in all of these fixtures, a soft effect that is highly decorative.

Every fixture is designed with regard for sanitary requirements as well as for durability and attractiveness. The curves are all free and shallow, the corners never sharp, always curving, offering no surface for the lodgment of dust or grease. Whether for kitchen, laundry, or bath room, so far as sanitary security, durability and strength, economy, attractiveness, and effective designing are concerned, nothing yet produced can equal American Porcelain.

PEDESTAL LAVATORY.



Q-20.

American Porcelain Pedestal Lavatory, 37x27 inches, Bowl 19½x14½ inches, Corinthian Combination Supply and Waste with China Handles, and Nickel Plated Trap.

	Class A	Class B
Price, complete, as described,	$92.00	$87.00
If with N. P. Supply Pipes and Air Chambers, add		3.60
Mirror, Beveled Edge Plate Glass, with White Enameled Wood Frame, 35½ x 25½ inches,		36.00
Lavatory Fittings:		
China Soap Dish and Brush Vase, with N. P. Holders,		6.00
Glass Shelf, 24 x 6 inches, with N. P. Brackets,		7.50
N. P. Towel Shelf and Rack, 20 inches long,		6.00

ELLIPTICAL LAVATORY.



Q-30.

American Porcelain Elliptical Lavatory, 27x37 inches, Bowl 14½x19½ inches, Corinthian Combination Supply and Waste with China Handles, N. P. Legs and Supports to wall and N. P. Trap.

	Class A	Class B
Price, complete as described,	$80.00	$72.00
If with N. P. Supply Pipes and Air Chambers, add		3.60
Mirror, Beveled Edge Plate Glass and N. P. Frame, 24x33 inches,		40.00
Lavatory Trimmings:		
Two China Tumblers with N. P. Holders,		5.00
N. P. Soap Dish with China Removable Tray,		2.50
Glass Shelf with N. P. Brackets,		12.00
Glass Towel Bar with N. P. Mountings and Cut Glass Ends,		10.00

ROCOCO LAVATORY.

FLEUR DE LIS DESIGN.



Q-40.

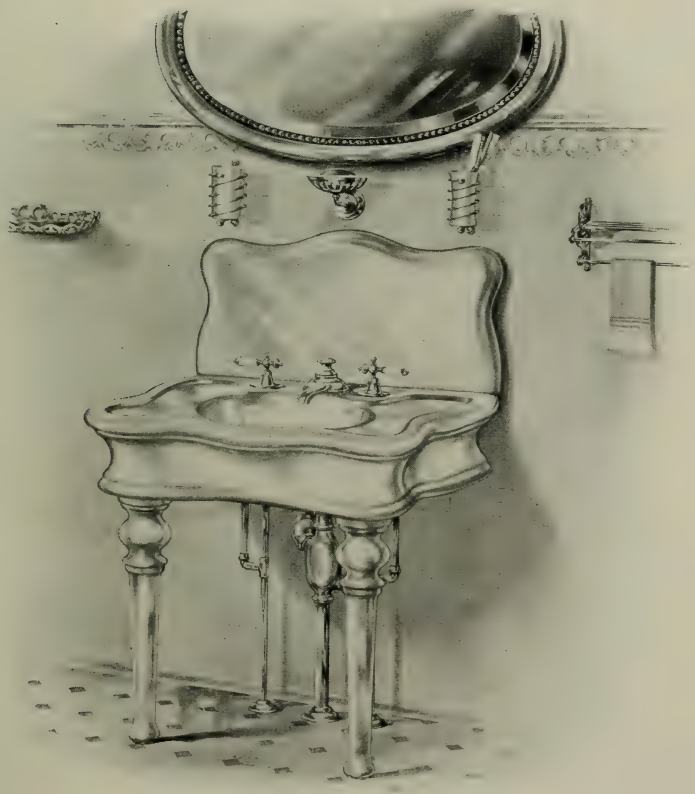
American Porcelain Lavatory, 24 x 34 inches, with 16-inch Porcelain Back, Lavatory and Back Embossed in Fleur de Lis design tinted in shell pink or pale blue, with gold tracery, Corinthian Combination Supply and Waste with China Handles, Nickel Plated Trap, Supplies with Air Chambers, and Porcelain Legs.

	Class A	Class B
Price, complete as described,	$113.00	$100.00

Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass with White Enameled Wood Frame, 30 inches in diameter,	$30.00
Two China Tumblers with Spiral Nickel Plated Holders,	5.00
Nickel Plated Soap Dish with China removable Tray,	3.00
Nickel Plated Brush and Comb Tray, 4 x 11 inches,	3.00
Glass Towel Bar with Nickel Plated Mountings and Cut Glass Ends, 30 inches long,	10.00

ROCOCO LAVATORY.



Q-50.

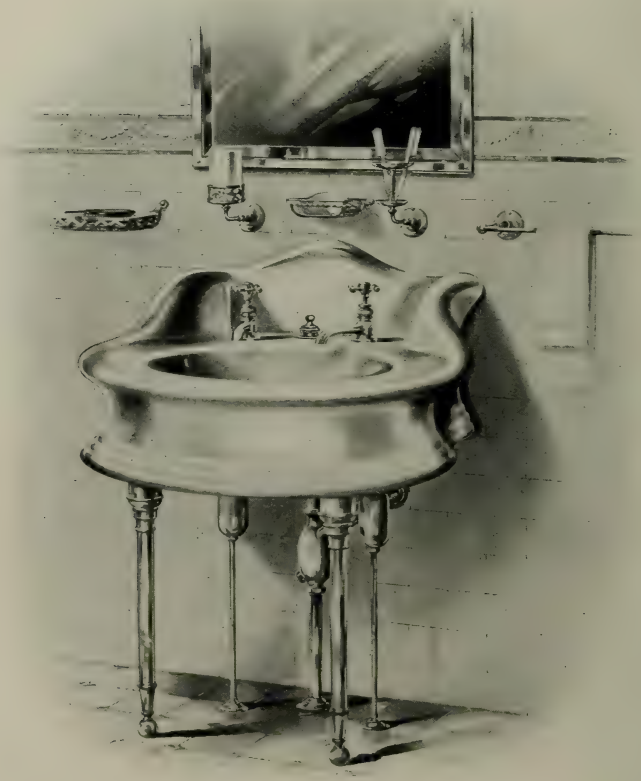
American Porcelain Lavatory, 24 x 34 inches, with 16-inch back, N. P. Corinthian Combination Supply and Waste with China Handles, N. P. Trap, Supplies with Air Chambers and Porcelain Legs.

	Class A	Class B	Class C
Price, complete as described,	$77.00	$65.00	$52.00

Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass with White Enameled Wood Frame, 25½ x 35½ inches,	$36.00
Two China Tumblers with Spiral N. P. Holders,	5.00
Nickel Plated Soap Dish with China Removable Tray,	3.00
Nickel Plated Brush and Comb Tray, 4 x 11 inches,	3.00
Nickel Plated Towel Shelf and Rack, 20 inches long,	6.00

OVAL LAVATORY.



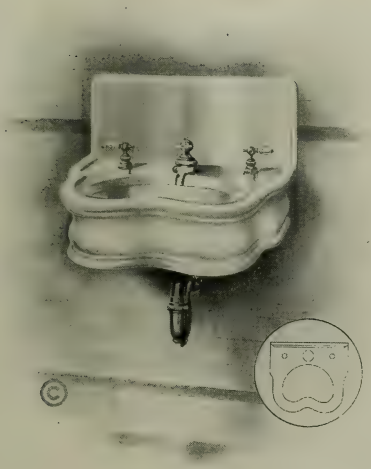
Q-80.

American Porcelain Oval One-Piece Lavatory, 30x24 inches, with N. P. Ideal Waste and Trap, Low-Down Compression Basin Cocks with China Name Plates, N. P. Supply Pipes with Air Chamber, and N. P. Brass Legs.

	Class A	Class B
Price, complete, as described,	$87.00	$82.00
Mirror, Beveled Edge Plate Glass, with N. P. Brass Frame, 24 x 20 inches,		20.00
Lavatory Fittings:		
N. P. Tumbler Holder, with Glass Tumbler,		2.00
N. P. Tooth Brush Holder,		2.00
N. P. Soap Dish, Removable Tray,		2.00
N. P. Comb and Brush Tray, 11 x 4 inches,		3.00
N. P. Towel Rack, 20 inches long,		1.50

CLOW PORCELAIN LAVATORIES.

MADDEN'S PATENT.



Q-84.

Q-84. Crescent American Porcelain One-piece Lavatory. 20x18 inches, Bowl 14x11½ inches, with Nickel Plated Crescent Combination Supply and Waste with China Handles, Nickel Plated Trap and Concealed Wall Brackets.

	Class A.	Class B.
Price, as described,	$45.00	$42.00
If with Supply Pipes, add		3.25

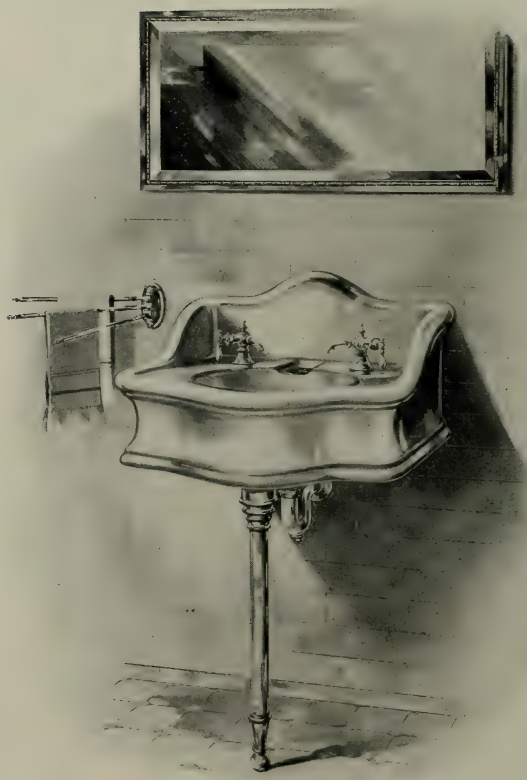


Q-86.

Q-86. Crescent American Porcelain One-piece Corner Lavatory, 16x16 inches, Bowl 14x11½ inches, with Nickel Plated Crescent Combination Supply and Waste with China Handles, Nickel Plated Trap and Concealed Wall Brackets.

	Class A.	Class B.
Price, as described,	$45.00	$42.00
If with Supply Pipes, add		3.25

SQUARE LAVATORY.



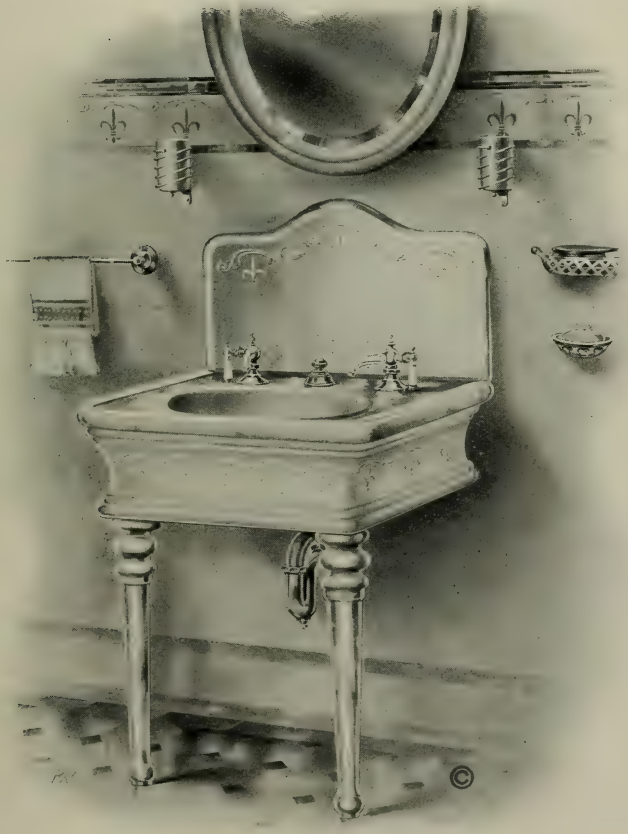
Q-90.

American Porcelain Square One-Piece Lavatory, 25x19 inches, Bowl 16x11 inches, with Overflow and N. P. Grate, Chain and Rubber Stopper, N. P. Waste and Trap, N. P. No. 0 Fuller Basin Cocks, and N. P. Brass Leg.

	Class A	Class B
Price, as described,	$35.00	$32.00
If with N. P. Supply Pipes and Air Chambers, add		3.60
Mirror, Beveled Edge Plate Glass, with N. P. Brass Frame, 24 x 18 inches,		14.00
N. P. Folding Towel Rack,		5.00

IONIC LAVATORY.

FLEUR DE LIS DECORATION.

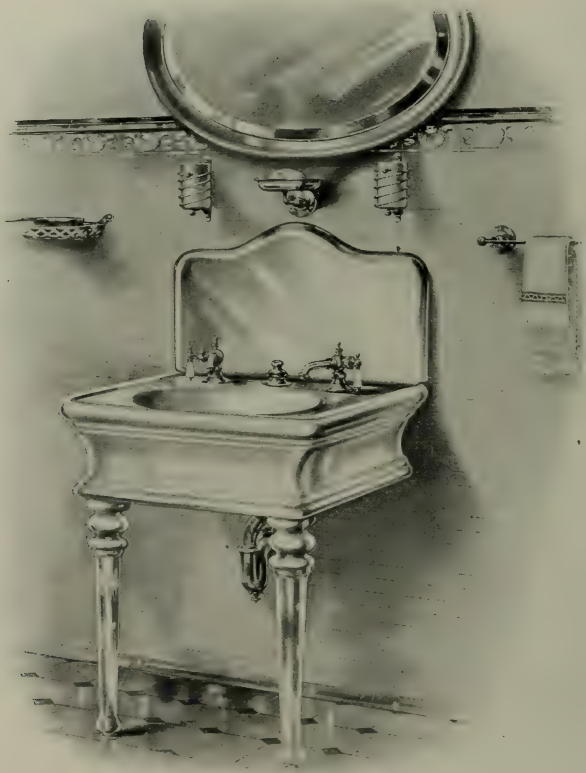


Q-95.

American Porcelain Ionic Lavatory, 21 x 25 inches, Bowl 14 x 19 inches, with Porcelain Back 15 inches high, Lavatory and Back embossed in Fleur de Lis design, N. P. Ideal Waste and adjustable Trap, N. P. Fuller Basin Cocks with China Handles, and Porcelain Legs.

	Class A	Class B
Price as described,	$66.00	$55.00
If with design tinted in shell pink or pale blue and gold tracery, add		26.00
If with N. P. Supply Pipes and Air Chambers, add		3.60
Lavatory Trimmings:		
Mirror, Beveled Edge Plate Glass with White Enameled Wood Frame, 25½ x 35½ inches,		36.00
Two China Tumblers with Spiral N. P. Holders,		5.00
N. P. Soap Dish with China removable Tray,		3.00
N. P. Brush and Comb Tray, 4 x 11 inches,		3.00
N. P. Towel Rod, 20 inches long,		1.50

IONIC LAVATORY.

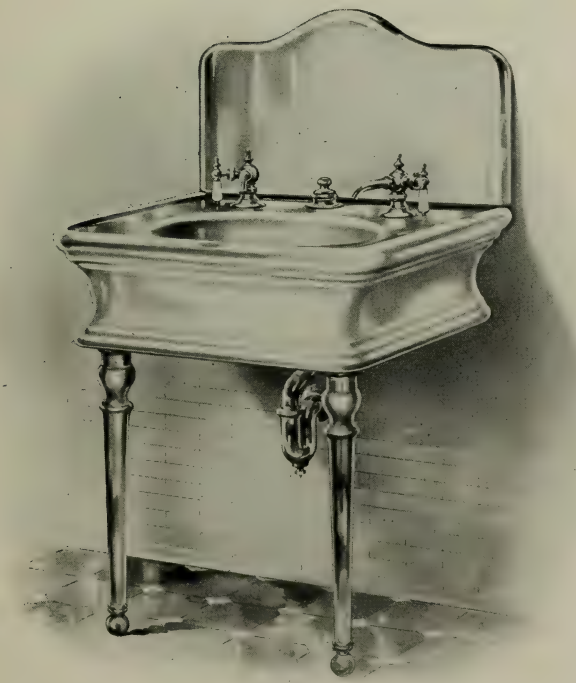


Q-100.

American Porcelain Ionic Lavatory, 25x21 inches, Bowl 19x14 inches, with American Porcelain Back 15 inches high, N. P. Ideal Waste and Adjustable Trap, N. P. Fuller Basin Cocks with China Handles, and Porcelain Legs.

	Class A	Class B
Price, with Porcelain Legs, as described,	$55.50	$47.00
Price, with N. P. Brass Legs,	54.00	48.00
If with N. P. Supply Pipes and Air Chambers, add		3.60
Lavatory Trimmings:		
Mirror, Beveled Edge Plate Glass, with White Enameled Wood Frame, 35½ x 25½ inches		36.00
Two China Tumblers with Spiral N. P. Holders,		5.00
N. P. Soap Dish with China Removable Tray,		3.00
N. P. Brush and Comb Tray, 11 x 4 inches,		3.00
N. P. Towel Rod, 20 inches long,		1.50

IONIC LAVATORY.

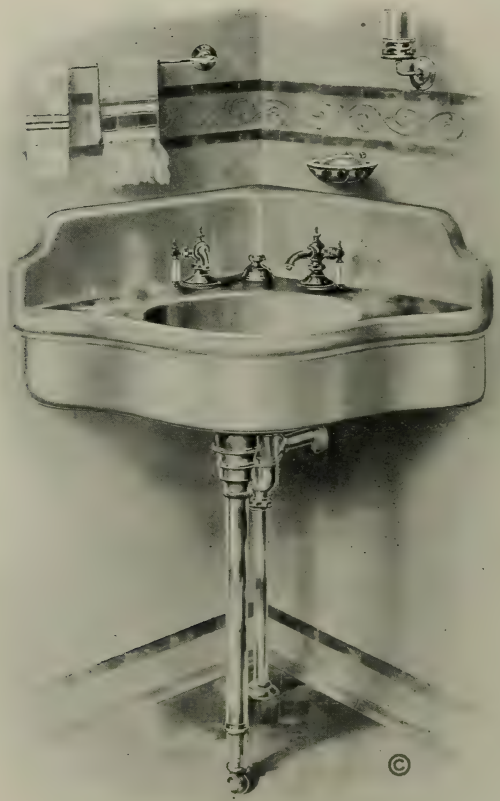


Q-110.

American Porcelain Ionic Lavatory, 25x21 inches, Bowl 19x14 inches, with American Porcelain Back 15 inches high, N. P. Ideal Waste and Adjustable Trap, N. P. Fuller Basin Cocks with China Handles, and Silver-bronzed Iron Legs.

	Class A	Class B	Class C
Price, as described,	$49.00	$42.00	$38.50
If with N. P. Brass Legs, add			3.00
If with N. P. Supply Pipes and Air Chambers, add			3.60

CORNER LAVATORY.

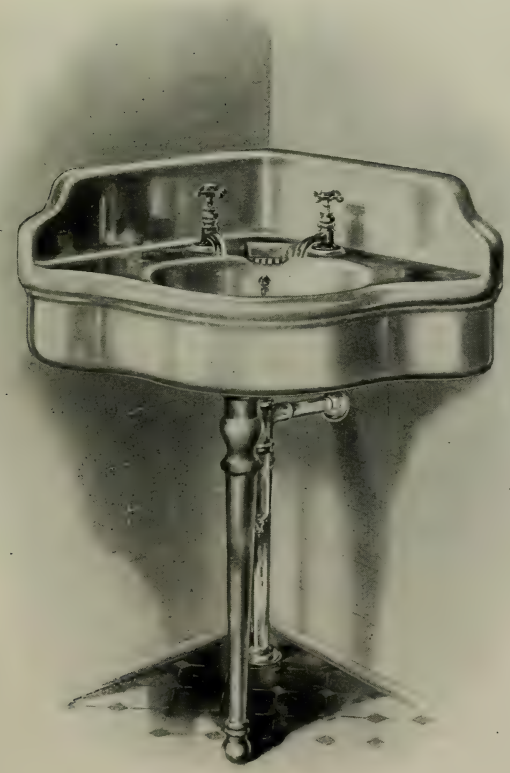


Q-120.

American Porcelain Corner Lavatory, 23 x 23 inches, with Back 6½ inches high; and Bowl 12 x 16 inches, all in one piece; N. P. Ideal Waste and Trap, N. P. Fuller Basin Cocks with China Handles, and N. P. Brass Leg.

	Class A	Class B
Price as described,	$47.00	$39.50
If with Silver Bronzed Iron Leg, deduct		1.50
If with N. P. Supply Pipes and Air Chambers, add		3.60
Lavatory Trimmings:		
N. P. Tumbler Holder with Glass Tumbler,		2.00
N. P. Soap Dish with removable Porcelain Tray,		3.00
N. P. Towel Rack, 18 inches long.		.85

CORNER LAVATORY.

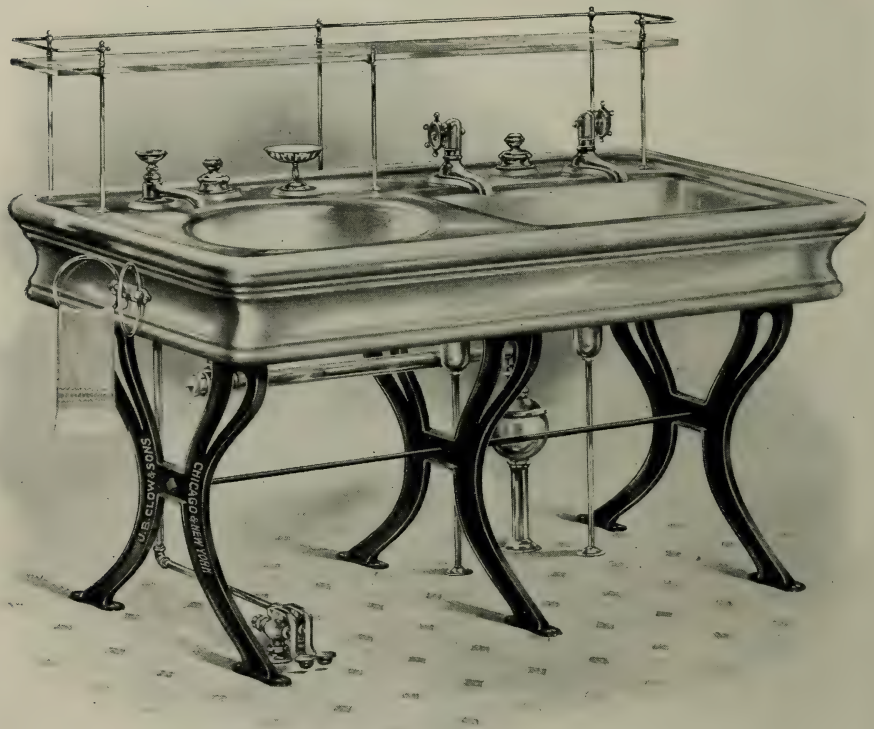


Q-130.

American Porcelain Corner Lavatory, 23x23 inches, with Back 6½ inches high, Bowl 16x12 inches, with Overflow and N. P. Grate, Chain and Rubber Stopper, N. P. Waste and Trap, N. P. Low Down Compression Basin Cocks with China Centers, and Silver-bronzed Iron Leg.

	Class A	Class B
Price, as described,	$40.00	$33.00
If with N. P. Brass Leg, add		1.50
If with N. P. Supply Pipes and Air Chambers, add		3.60

SURGEON'S COMBINATION LAVATORY



Q-140.

Porcelain Lavatory supported on Iron Standards, Bronzed or White Enamel Paint Finish; N. P. Frame and Glass Shelf, Ideal Wastes with Continuous Waste and Anti-Siphon Trap, N. P. Broughton Self-Closing Cocks, Supply Pipes with Air Chambers, Combination Treadle Valve for Hot and Cold Water, Supply Pipe and Nozzle; Soap Dish with China Tray, and N. P. Towel Ring at each end of Lavatory.

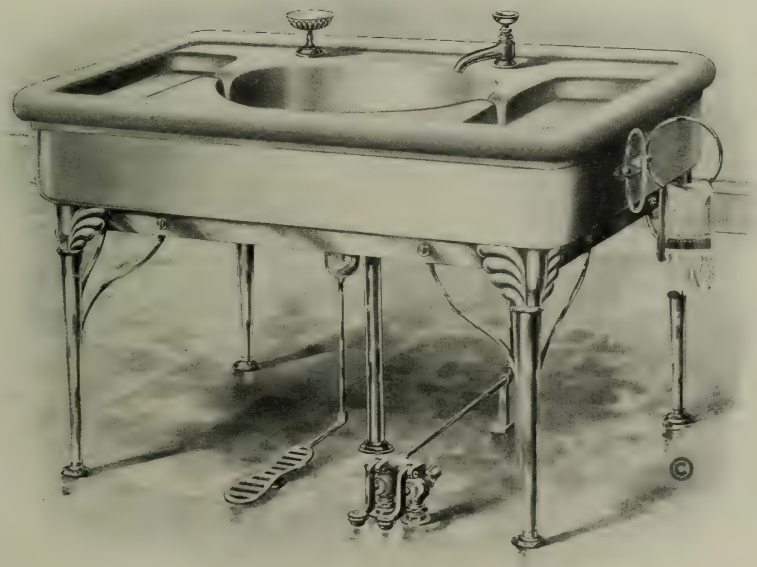
DIMENSIONS.

Oval Bowl, 12x20 inches; Sink Basin, 12x25 inches; total length, 58 inches; total width, 25 inches.

	Class A	Class B
Complete as described,	$180.00	$175.00
If with Waste to be operated by Pedal, add	10.00	

For Physicians, Surgeons, Hospitals, Medical Colleges, etc., the Clow Surgeon's Combination Lavatory exactly meets requirements in a most practical manner. It is also a very handsome fixture and has been designed with careful consideration of the needs of the operating room. Coming to the Lavatory with soiled hands, after operating, or to cleanse them before the operation, the surgeon has only to press a foot upon the Pedal and either hot or cold water, or both, are turned on without his touching a hand to the faucet. The Lavatory top need not be encumbered with bottles or brushes, as the Glass Shelf is designed to support them, while the rail prevents their slipping off. The fixture may, therefore, be placed away from the wall in any location desired. At the right of the Oval Bowl is a rectangular one, the size and shape of which is specially adapted for cleansing instruments before and after operating. The Glass Shelf is firmly supported and a tray or pan of instruments may with perfect safety rest upon it.

SURGEON'S LAVATORY.



Q-150.

American Porcelain Lavatory, supported on Iron Standard, Bronzed or White Enamel Paint Finish, N. P. Trap with Pedal Waste Valve, Combination Pedal Valve for hot and cold water, Supply Pipe and Nozzle, N. P. Soap Dish with China Tray and N. P. Ring Towel Rack at each end of Lavatory.

	Class A	Class B
Complete as described,	$110.00	$100.00

DIMENSIONS.

Top, 24½x36½ inches; Bowl, 12½x16½ inches; length of Trays, inside, 14 inches.

The Clow Surgeon's Lavatory is especially designed for Physicians, Surgeons, Hospitals, Medical Colleges, etc. The standard upon which it is supported is strongly bolted and gives perfect firmness to the substantial Porcelain top, the latter being all in one piece. Setting the fixture up in this manner is a great improvement over the old style of supporting against the wall, particularly where perfect sanitary conditions are absolutely necessary, as in hospitals. By means of this arrangement, the fixture can be placed anywhere in the room, and even when set up near the wall it can be far enough forward to allow for cleaning behind it. As there are no crevices or corners for catching dust or grease, and as it is glazed on the back, the entire Lavatory can, like our Surgeon's Combination Lavatory, Q-140, be kept perfectly clean. The pedals obviate the necessity of touching any part of the fixture with the hands. The hot and cold water are turned on and off by means of the Combination Pedal at the right, while the waste is operated by the Pedal at the left. The top is countersunk to form Trays for instruments, which may be placed in a Tray on one side, then cleansed in the Bowl and allowed to drain in the Tray on the other side. Small grooves for drainage open from these Trays or countersunk spaces into the Bowl at the top.

ANNEX LAVATORY.

FOR HOTELS, INSTITUTIONS, SCHOOLS, RAILWAY STATIONS, ETC.



Q-170.

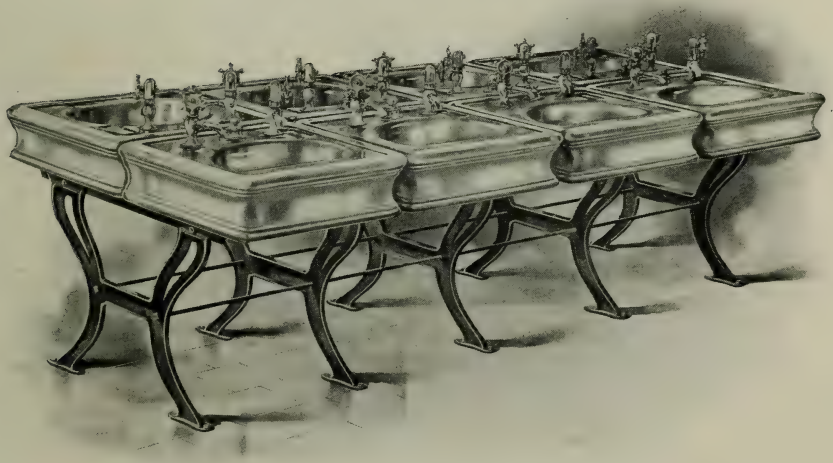
American Porcelain Lavatory, 21 x 25 inches each, Bowl 14 x 19 inches, with 6½-inch Back all in one piece, N. P. Broughton self-closing Basin Cocks, Ideal Waste, 1¼-inch N. P. Continuous Waste with Clow Anti-siphon Trap, and Silver Bronzed Iron Legs.

	Class A	Class B	Class C
Complete as described,	$168.00	$145.00	$124.00
For each single Lavatory, add or deduct	52.50	45.00	39.00
Lavatory Trimmings :			
Rubber Soap Dishes, each,			.40
N. P. Brush and Comb Trays, 4 x 11 inches, each,			3.00

The Annex Lavatory is specially designed for Hotels, Institutions and all public Washrooms. The Slab, Bowl and Back are in one piece, with corners and edges gently curving, features which render this, like all of our one-piece Porcelain Fixtures, absolutely sanitary and free from crevices in which dust or grease could collect. The graceful, low Back is new and a decided improvement, occupying little wall space, yet being high enough to prevent water from splashing behind the Lavatory. There is nothing more appropriate, more sanitary or more imposing for the public Washroom than the Annex combination as above illustrated and described.

CLOW SECTIONAL LAVATORY.

FOR HOTELS, SCHOOLS, FACTORIES, INSTITUTIONS, ETC.



Q-200.

American Porcelain Double Sectional Lavatories on Silver Bronzed Iron Standards; N. P. Ideal Wastes and Broughton Self-closing Faucets.

Each Section consists of two Lavatories, back to back, with Standard; Wastes, and two Faucets for each Lavatory.

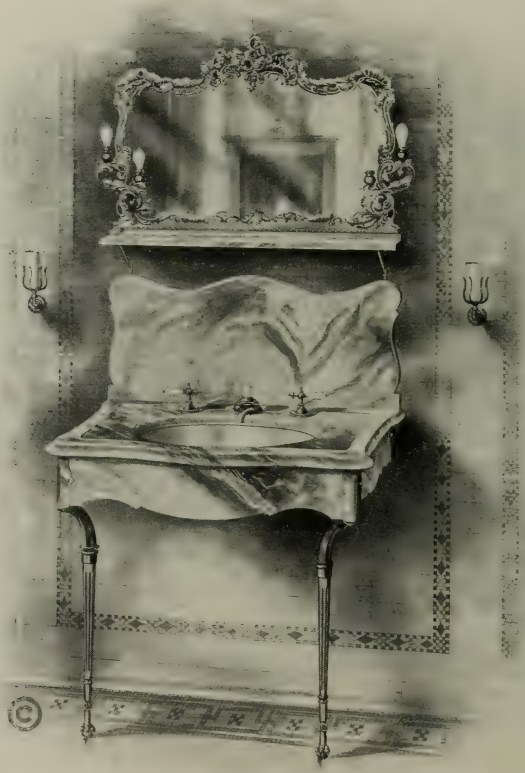
PRICES.

	Class A	Class B	Class C
One Section (two bowls) as described,	$ 80.00	$ 70.00	$ 65.00
Two Sections (four bowls) " "	156.00	132.00	124.00
Three Sections (six bowls) " "	232.00	194.00	184.00
Four Sections (eight bowls) " "	308.00	258.00	243.50
Five Sections (ten bowls) " "	384.00	320.00	303.00
For each additional Section of two Lavatories, back to back, add	76.00	62.00	59.50

If with N. P. 1½-inch connected Waste, with 2-inch Trap for one Section (two bowls), add	$12.00
For each additional Section of two bowls add, for Waste,	5.00

Strong and always cleanly, this combination of Lavatories provides splendid facilities where good accommodations for large numbers are desired. It is an elegant fixture and an economical one. There is nothing better or handsomer for the purpose than American Porcelain Bowls; the Standards are practical and at the same time attractive, while the Broughton is the best self-closing work ever invented. Broughton work does not get out of order, is easy to operate and its handsome appearance adds greatly to the effect.

CLOW RENAISSANCE LAVATORIES.



R-2.

Mexican Onyx Slab, 24x32 inches, 1½ inches thick, 16-inch back, and 5-inch Aprons, all in Renaissance Rococo design, 15x19 China Oval Basin, Nickel Silver Corinthian Combination Supply and Waste (Fuller Pattern) with Onyx Handles and Waste Knob, Nickel Silver Legs and Apron Supports. Price, as described . . . $307.00

If with Nickel Silver Trap and Supplies, add 23.25

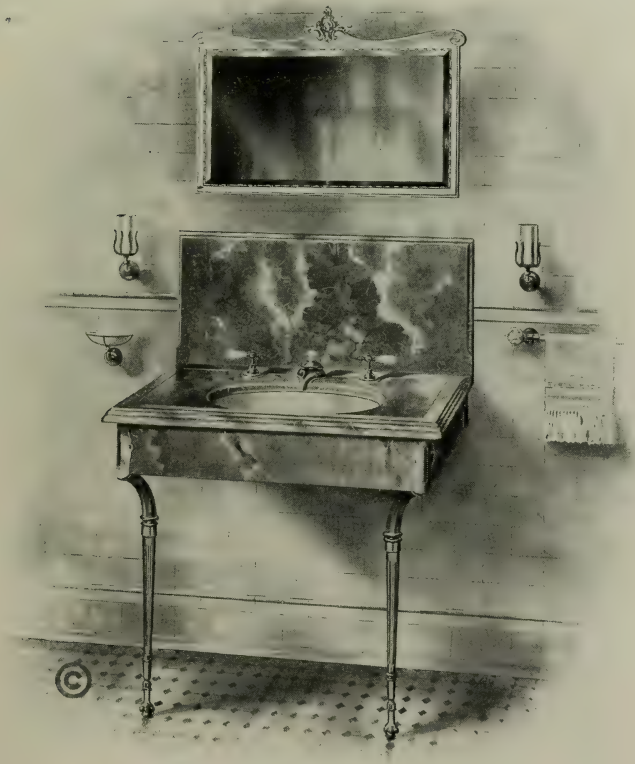
Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass and Silver Bronzed Frame with Electroliers, 24x30 inches . . . 100.00
Onyx Shelf, 7x30 inches, and Nickel Silver Brackets 20.00
Two China Tumblers with Nickel Silver Holders 7.00

This Lavatory is designed in Renaissance true Rococo for use in residences planned in Renaissance or any highly ornate style. We believe the consistency in execution at which we have aimed will be appreciated by those who admire grace in art and worth in material.

The Trimmings can be furnished Silver Plated if desired and the Lavatory in any Onyx, Jasper or Marble.

CLOW AGATE LAVATORIES.



R-4.

Brazilian Agate Slab, 24x36 inches, 1¼ inches thick, 16-inch Back, 5-inch Aprons, 15x19 China Oval Basin, Solid Bronze Metal Corinthian Combination Supply and Waste (Fuller Pattern), with Agate Handles and Waste Knob, Bronze Legs and Apron Supports. Price, as described $292.00

If with Nickel Silver Trap and Supplies, add 23.25

Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass with handsomely Bronzed Wood Frame, 28x32 inches, ... 60.00
Two China Tumblers with Bronze Holders 7.00
Bronze Soap Dish with China Removable Tray 5.00
Glass Towel Bar with Bronze Mountings and Cut Glass Ends, 30 inches long, ... 14.50

The peculiar richness of this Lavatory is largely due to the beautiful color combinations formed by the clouded greens and old gold shades of the Agate and the deep lustre of the Bronze. The enduring qualities of the latter render it thoroughly practical, while nothing more elegant or refined has ever been furnished for Lavatory Trimmings. The Bowl, of China, is rich, strong and delicate to translucence.

Trimmings can be furnished in Silver Plate, Nickel Silver or Nickel Plated Brass and Lavatory in any Onyx, Jasper or Marble, if preferred.

CLOW COLONIAL LAVATORIES.



R-6.

Statuary Marble Slab, 24x32 inches, 1¼ inches thick, 16-inch Back with Pilasters, Shelf 6x31 inches, all in Colonial design, 15x19 China Oval Basin, Nickel Silver Corinthian Combination Supply and Waste (Fuller Pattern) with China Handles and Waste Knob, Nickel Silver Legs and Apron Supports. Price, as described . . . $252.50

If with Nickel Silver Trap and Supplies, add 23.25

Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass, with Colonial White Enameled Wood Frame, 12x32 inches, ... 43.00

Two China Tumblers with Nickel Silver Holders 8.00

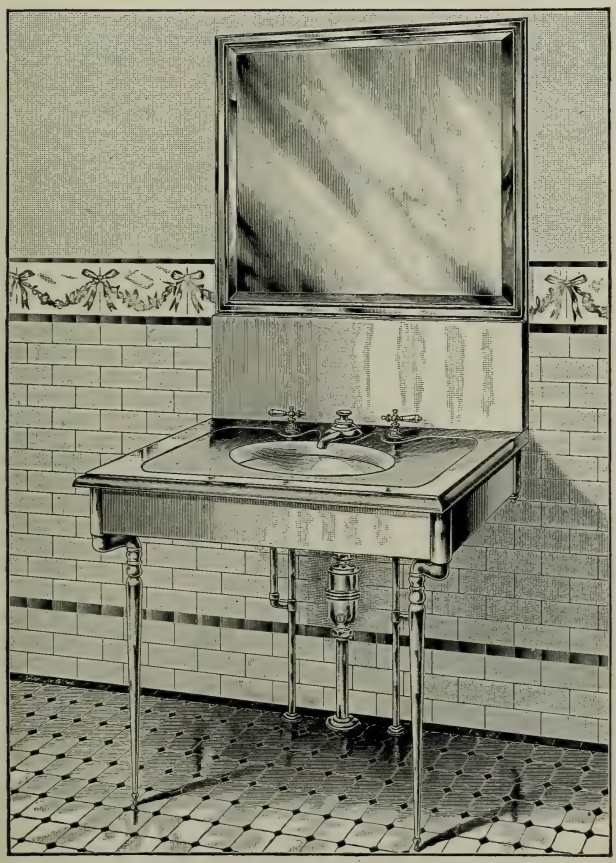
Nickel Silver Soap Dish with China Removable Tray 4.00

Porcelain Towel Bar with Nickel Silver Mountings, 30 inches Long 10.50

For a Colonial Residence or Dressing Room, nothing could be more appropriate or elegant than this Lavatory, which conforms to the Colonial in every line, in its delicate proportions, its pristine simplicity and the dainty color combination of white and silver. The front Apron is cut thicker at the center than at the sides, giving the Colonial Bow Front.

Trimmings can be furnished Silver Plated or in Nickel Plated Brass and the Lavatory in any Onyx, Jasper or Marble.

CLOW OPEN LAVATORIES.



R-7.

Italian Marble Slab, 24x32 inches, 1¼ inches thick, 14-inch Back, 5-inch Apron, 15x19 Oval Basin, Beveled Plate Glass Mirror, 30x32 inches, with Nickel Plated Frame, Corinthian Combination Supply and Waste with Ivory Handles, Supply Pipes with Air Chambers, Trap with Vent, Recessed Legs and Apron Supports.

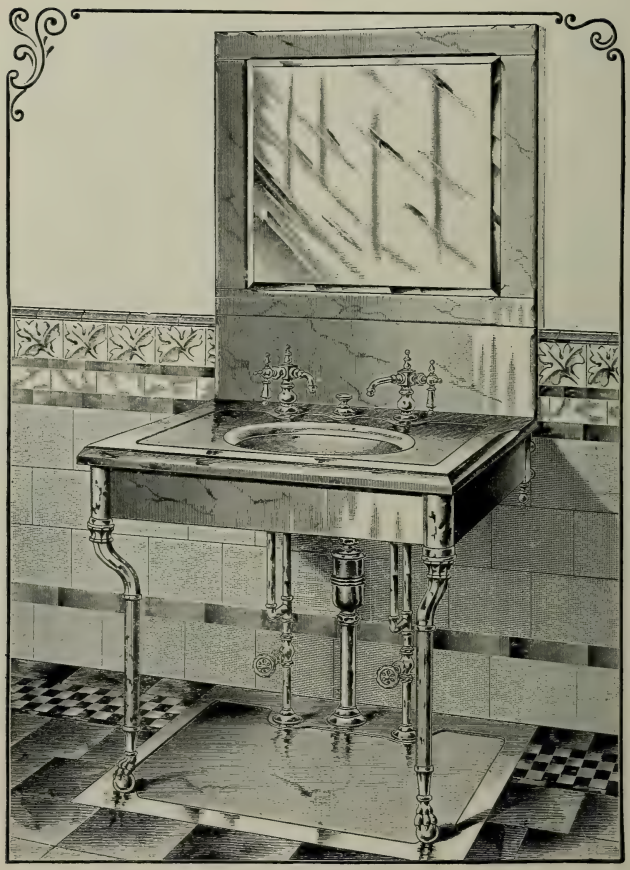
Price, as described, ... $87.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper and in any size required.

Our Marble is carefully selected and highly finished.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in Section T.

CLOW OPEN LAVATORIES.



R-8.

Italian Marble Slab 22x32 inches, 1¼ inches thick, 14-inch Back, 5-inch Apron, 15x19-inch Oval Basin, Beveled Plate Glass Mirror, 24x28 inches, with Italian Marble Frame, Nickel Plated Ideal Basin Waste, No. 4 Fuller Basin Cocks, Recessed Legs with Apron Holders, Ideal Trap and Supply Pipes with Air Chambers and Stop Valves.
Price, as described, ... $64.00

Add for countersunk Italian Marble Floor Slab, 22x32 inches, 1¼ inches thick, ... 7.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in Section T.

CLOW DRESSING TABLES.

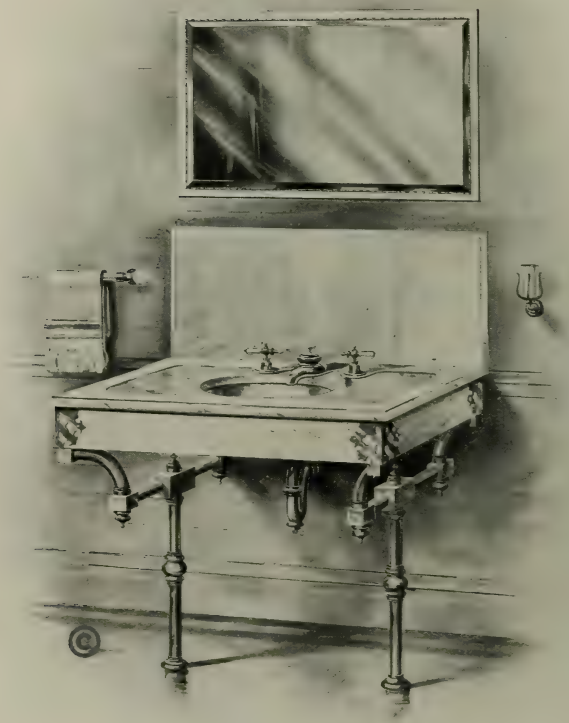


R-11.

Colonial Dressing Table, with Statuary Marble Slab, 15 x 33 inches; Nickel Plated Brass Brackets, and Beveled Edge Plate Glass Mirror with Nickel Plated Frame, 30 x 33 inches.

Complete, as described, ... $65.00

CLOW OPEN LAVATORIES.



R-12.

Italian Marble Slab, 24 x 32 inches, 1¼ inches thick, 14-inch Back, 5-inch Aprons, 15 x 19 Oval Basin, Nickel Plated Corinthian Combination Supply and Waste (Fuller Pattern) with China Handles and Waste Knob, Nickel Plated Trap, Combination Legs and Apron Supports. Price, as described, ... $76.00

If with Nickel Plated Supplies, add 3.25

Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass, with Nickel Plated Brass Frame, 30 x 32 inches, ... $28.00

China Tumbler, with Nickel Plated Holder, ... 2.50

Glass Towel Bar with Nickel Plated Mountings and Cut Glass Ends, ... 10.00

CLOW ELLIPTICAL LAVATORIES.



R-13.

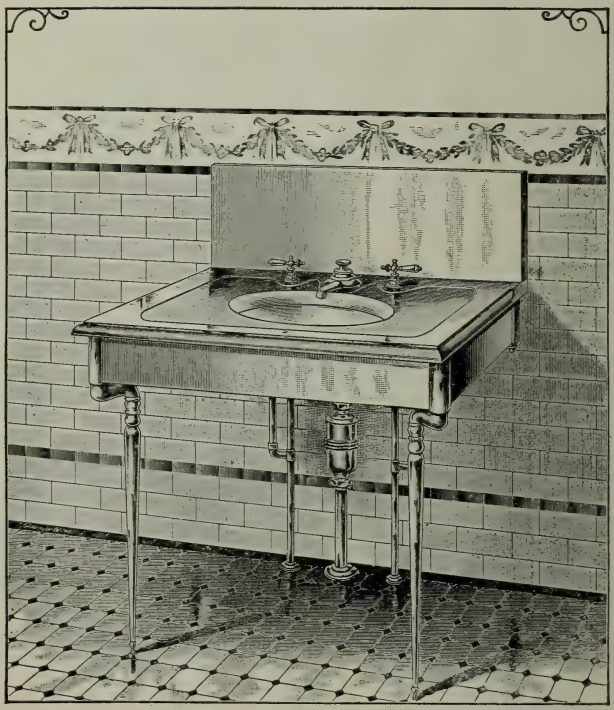
Elliptical Italian Marble Lavatory, 32x24 inches, 2 inches thick, deeply countersunk, 15x19 Oval Basin, Nickel Plated Corinthian Combination Supply and Waste with China Handles, Nickel Plated Brass Trap, Supplies with Air Chambers, Nickel Plated Legs and Wall Bracket.

Price, complete as described, ... $65.00

Lavatory Trimmings:

Mirror, Beveled Edge Plate Glass with Nickel Plated Brass Frame, 24x18 inches	14.00
White Porcelain Shelf and Towel Bar with Nickel Plated Brackets, 24 inches long	14.00
Nickel Plated Soap Dish with China Removable Tray	2.75
Nickel Plated Tumbler Holder and China Tumbler	2.50

CLOW OPEN LAVATORIES.



R-15.

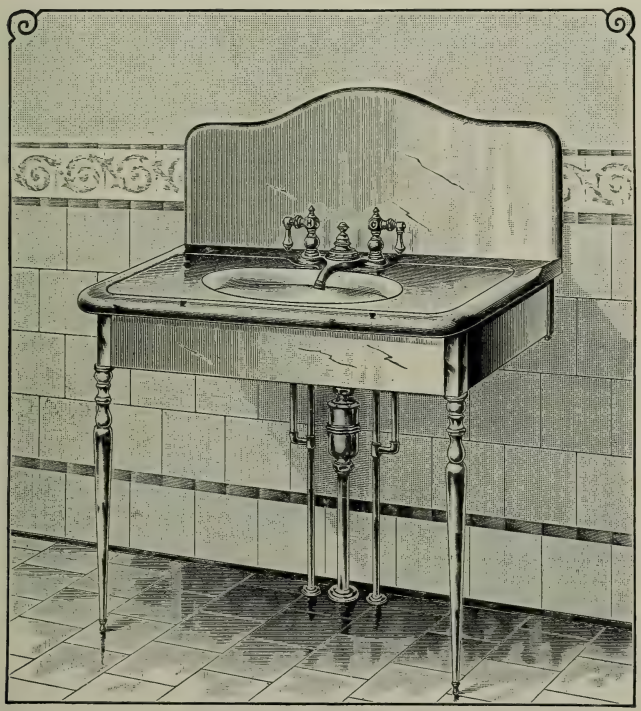
R-15. Italian Marble Slab, 24x32 inches, 1¼ inches thick, 14-inch Back, 5-inch Apron, 15x19 Oval Basin, Nickel Plated Corinthian Combination Supply and Waste with Ivory Handles, Supply Pipes with Air Chambers, Trap with Vent, Recessed Legs and Apron Support. Price, as described, ... $59.50

R-16. Complete as described, with Right Hand End, $59.50; R-17, with Left Hand End, $59.50.

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in Section T.

CLOW OPEN LAVATORIES.



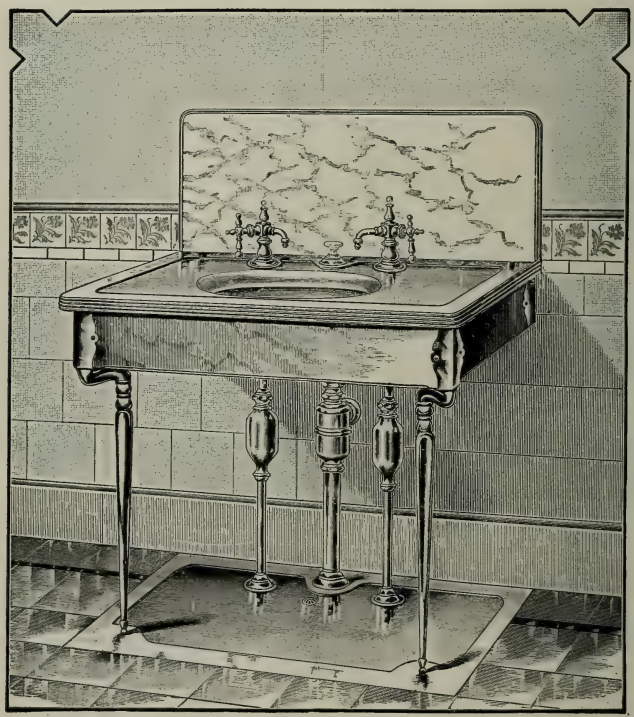
R-22.

R-22. Italian Marble Slab, 24x32 inches, 1¼ inches thick, 14-inch Back, 5-inch Apron, 15x19 Oval Basin, Nickel Plated Combination Supply and Waste, Supply Pipes with Air Chambers, Trap with Vent, Legs and Apron Supports. Price, as described, ... $60.00

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper.

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings shown in Section T.

CLOW OPEN LAVATORIES.

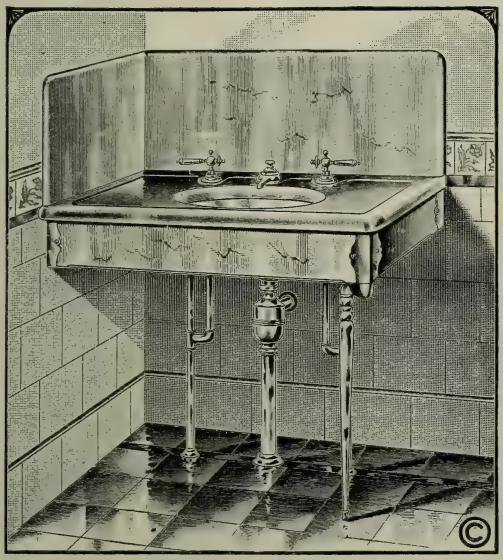


R-29.

R-29. Italian Marble Slab 22 x 32 inches, 1¼ inches thick, 14-inch Back, 5-inch Apron, 15 x 19-inch Oval Basin, Nickel Plated Ideal Basin Waste, No. 4 Fuller Basin Cocks, Recessed Legs with Apron Holders, Trap with Waste, and Supply Pipes with Bell Air Chambers. Price, as described, ... $51.50
Add for countersunk Italian Marble Floor Slab, 22 x 32 inches, 1¼ inches thick, ... 7.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings, shown in Section T.

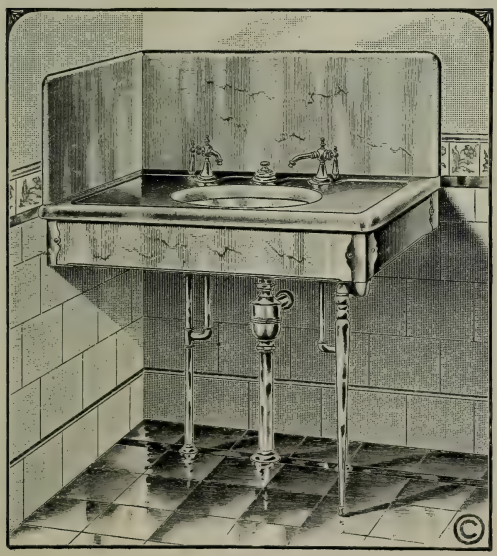


R-30

R-30. Italian Marble Slab, 24x32 inches, 1¼ inches thick, 14-inch Back and Left Hand End, 5-inch Apron, 15x19 Oval Basin, Nickel Plated Corinthian Combination Supply and Waste with Nickel Plated Handles, Supply Pipes with Air Chambers, Trap with Vent, Recessed Leg, Apron Supports and Basin Clamps.

Price - - - - - - - - $55.50

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in Section T.

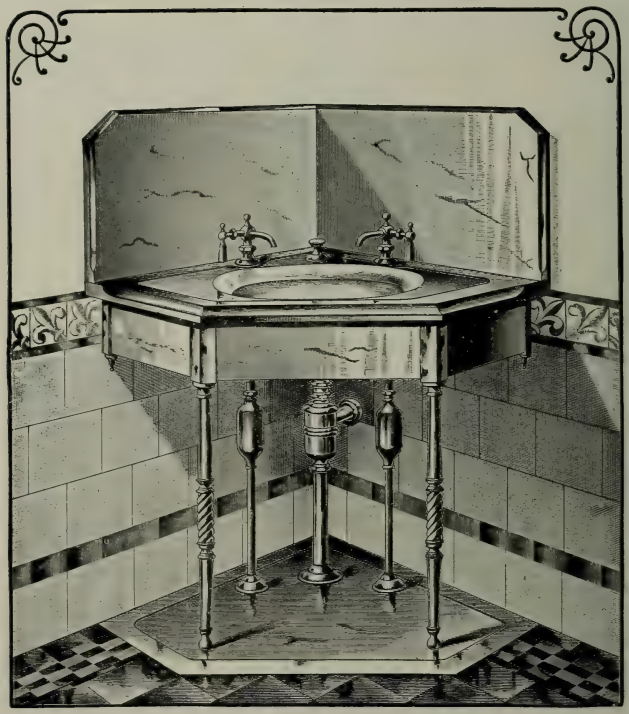


R-31.

R-31. Italian Marble Slab, 22x32 inches, 1¼ inches thick, 14-inch Back and Left Hand End, 5-inch Aprons, 15x19 Oval Basin, Nickel Plated Ideal Waste, No. 9 Fuller Basin Cocks with Nickel Plated Handles, Supplies with Air Chambers, Trap with Vent, Recessed Leg, Apron Supports and Basin Clamps.

Price - - - - - - - - $47.50

CLOW OPEN LAVATORIES.



R-36.

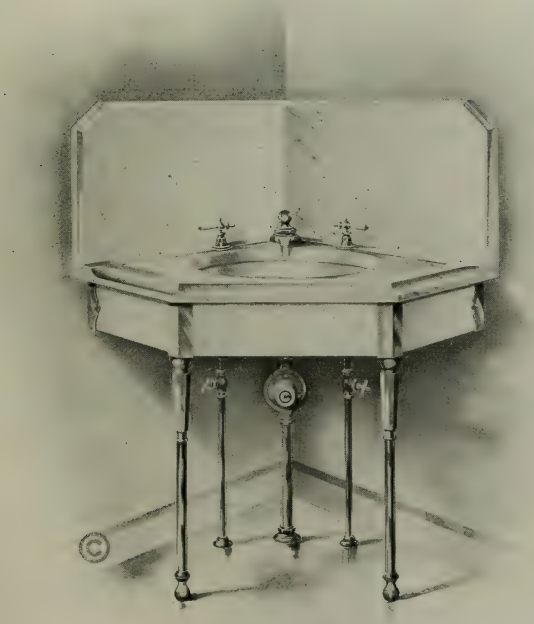
Italian Marble Corner Slab 26 x 26 inches, 1¼ inches thick, 14-inch Backs, 5-inch Apron, 15 x 19-inch Oval Basin, Nickel Plated Ideal Basin Waste, No. 6 Fuller Basin Cocks, Brass Legs with Apron Holders, Trap with Waste, and Supply Pipes with Bell Air Chambers. Price, as described, ... $51.50

Add for countersunk Italian Marble Floor Slab, 26 x 26 inches, 1¼ inches thick, ... 7.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

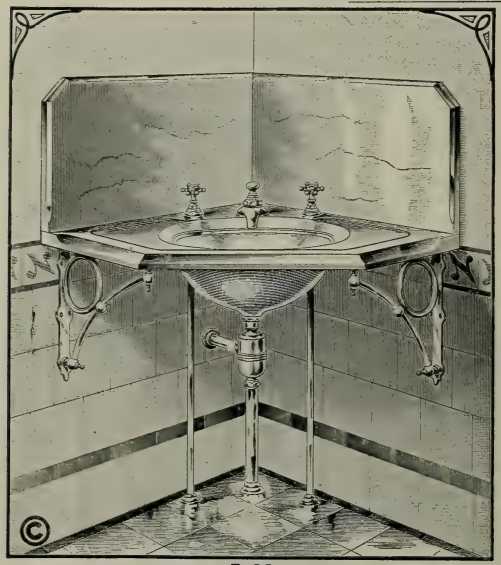
Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings, shown in Section T.

CLOW SPECIAL © CORNER LAVATORY



R-37.

Italian Marble Corner Slab, 26x26 inches, 1¼ inches thick, 14-inch Backs, 5-inch Aprons, 15x19-Oval Basin, Nickel Plated Crescent Combination Supply and Waste with China Handles, Nickel Plated ½-inch Supplies with Stop Cocks, Unique Anti-siphon Trap, Legs and Apron Supports. Price, as described, - - - - $58.50

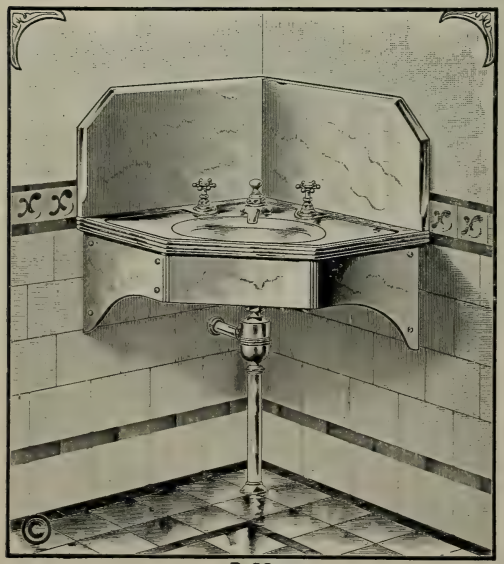


R-38.

R-38. Italian Marble Slab, 26x26 inches, 1¼ inches thick, 14-inch Backs, 14x17-inch Oval Basin, N. P. Corinthian Combination Supply and Waste (Compression), ½-inch Supply Pipes to floor, N. P. Brass Brackets and N. P. Trap with Vent, and Waste to floor.

Price, as described, - - - - $51.00

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in Section T.

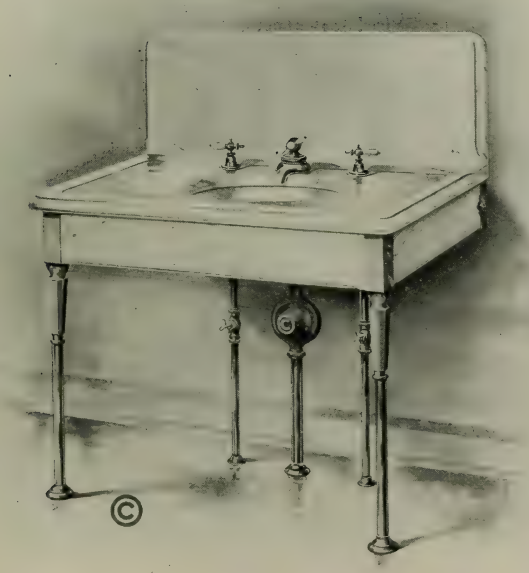


R-39.

R-39. Italian Marble Slab, 26x26 inches, 1¼ inches thick, 14-inch Backs, 5-inch Marble Aprons on front and 9-inch Marble Bracket Aprons at sides, 14x17-inch Oval Basin, N. P. Corinthian Combination Supply and Waste (Compression), Concealed Brackets and N. P. Trap with Vent and Waste to floor.

Price, as described, - - - - $49.00

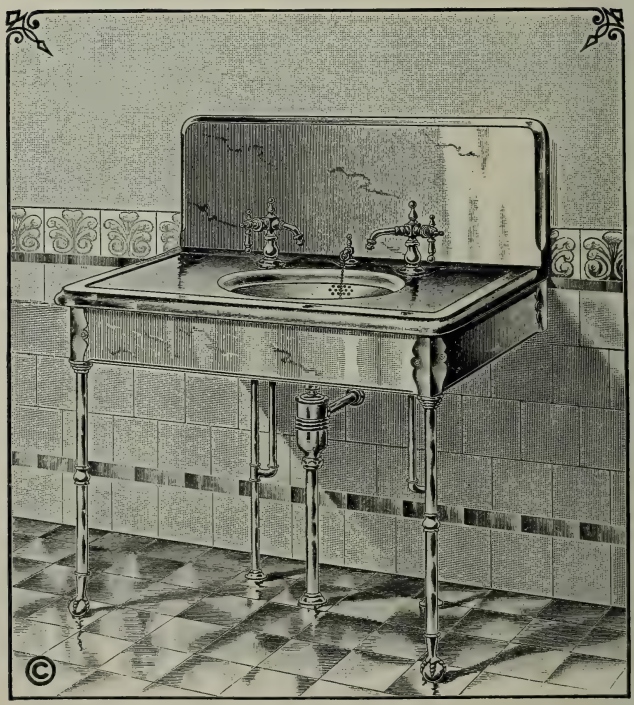
CLOW SPECIAL © LAVATORY



R-41.

Italian Marble Slab 24x32 inches, 1¼ inches thick, 14-inch Back, 5-inch Aprons, 15x19 Oval Basin, Nickel Plated Crescent Combination Supply and Waste with China Handles, Nickel Plated ½-inch Supplies with Stop Cocks, Unique Anti-siphon Trap, Legs and Apron Supports. Price, as described, ... $57.50

CLOW OPEN LAVATORIES.



R-43.

R-43. Italian Marble Slab, 22 x 32 inches, 1¼ inches thick, 14-inch Back, 5-inch Apron, 15 x 19 inch Oval Basin, Nickel Plated No. 4 Fuller Basin Cocks, Chain Stay, Legs with Apron Holders, Trap with Waste, and Supply Pipes with Air Chambers. Price as described, ... $45.00

R-44. Complete as described, with Right Hand End, ... 45.00

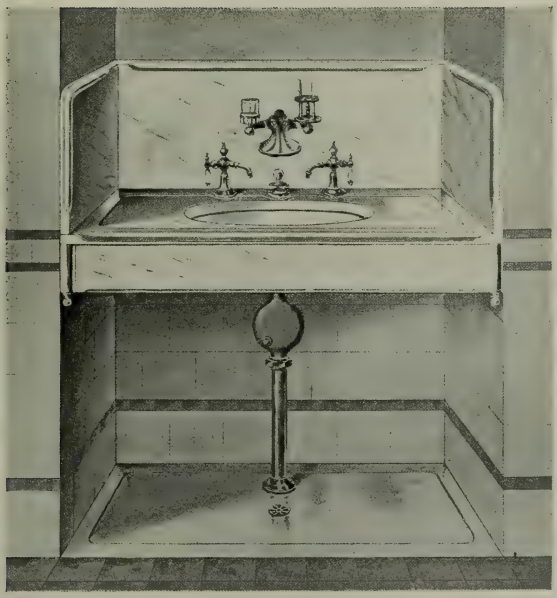
R-45. Complete as described, with Left Hand End, ... 45.00

Add for countersunk Italian Marble Floor Slab, 22 x 32 inches, 1¼ inches thick, ... 7.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in Section T.

CLOW OPEN RECESS LAVATORIES.



R-46.

R-46. Italian Marble Slab, 22 x 32 inches, 1¼ inches thick, 16-inch Back and two Ends, Edges quarter-round, 5-inch front Apron and Apron Supports, 14 x 17-inch Oval Basin, Nickel Plated Ideal Basin Waste, No. 9 Nickel Plated Fuller Basin Cocks, Nickel Plated Trap with Waste. Price as described, ... $50.50

If with N. P. Supply Pipes and Air Chambers, add 5.25

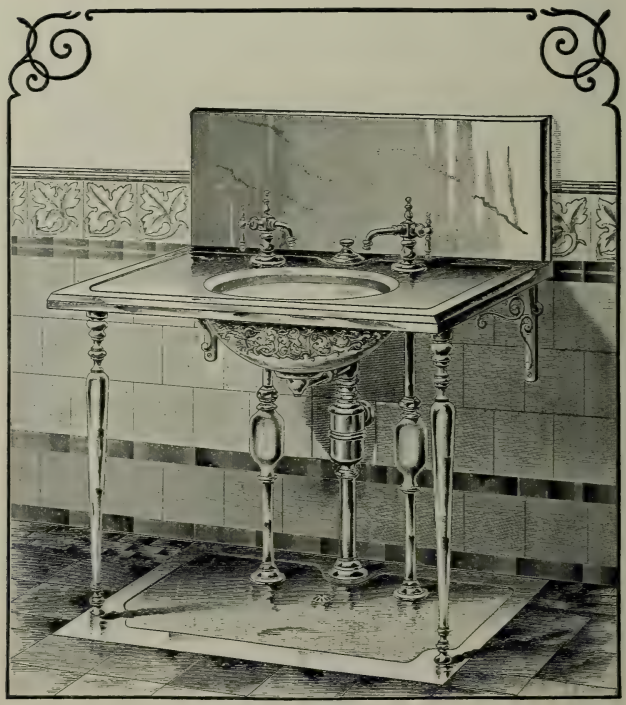
If with countersunk Italian Marble Floor Slab, 22 x 32 inches, 1¼ inches thick, add 7.50

If without Combination Soap, Tumbler, Tooth and Nail Brush Holder, deduct 5.00

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in Section T.

CLOW OPEN LAVATORIES.



R-50.

R-50. Italian Marble Slab 22 x 32 inches, 1¼ inches thick, 14-inch Back, 15 x 19-inch Oval Embossed Basin, Nickel Plated Ideal Basin Waste, No. 4 Fuller Basin Cocks, Heavy Cast Brass Legs with Combination Bracket, Trap with Waste, and Supply Pipes with Bell Air Chambers. Price as described, ... $50.00

R-51. Complete as described, with Right Hand End, ... 50.00

R-52. Complete as described, with Left Hand End, ... 50.00

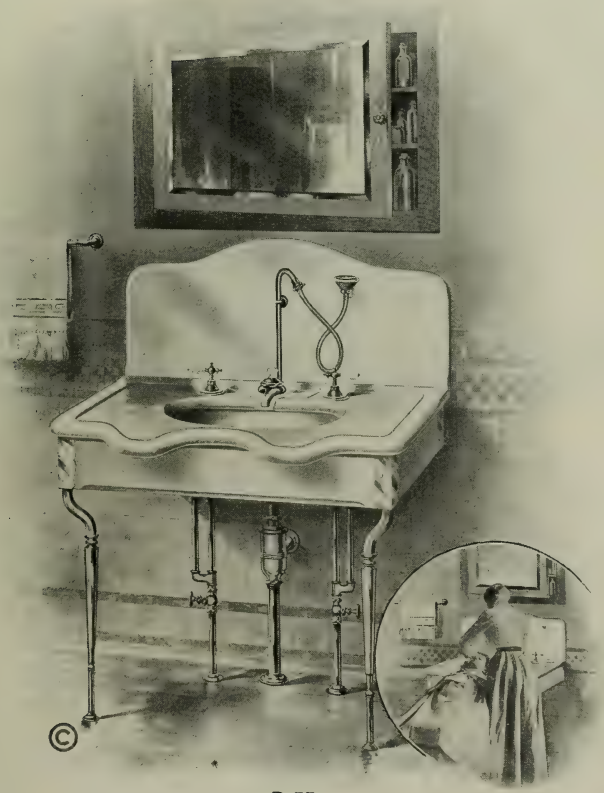
Add for countersunk Italian Marble Floor Slab, 22 x 32 inches, 1¼ inches thick, ... 7.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in Section T.

CLOW SHAMPOO LAVATORIES.

FOR HAIR-DRESSING PARLORS.



R-55.

Italian Marble Shampoo Slab, 26x36 inches, 1½ inches thick, 18-inch Back, 5-inch Aprons, 15x19 Oval Basin, Corinthian Combination Supply, Shampoo Cock and Waste with Porcelain Handles, Rubber Hose and 3½-inch Shampoo Sprinkler with Rubber Ring, N. P. Holder, N. P. Supply Pipes and Air Chambers, N. P. Trap with Vent and Waste to Floor, N. P. Brass Recess Legs and Apron Supports.

Price, as described, ... $81.00

This Lavatory greatly facilitates hair-dressing and contributes materially to the comfort of the patron. It may be used either facing the bowl or with the back of the head resting upon it as illustrated above. Our special Supply, here shown, also has distinct advantages. Only one set of handles is required for operation of both Nozzle and Sprinkler. By opening the handles water flows through the Nozzle into the Bowl. While the Valves are still open, by turning forward the Gooseneck connecting with hose, the water is shut off from the Nozzle and turned on in the Sprinkler. The water may be shut off or turned on for the Sprinkler in the regular way as long as the Gooseneck or upright pipe remains turned forward over the Bowl. When it is turned to one side again, the Valves will operate the Nozzle.



R-57.

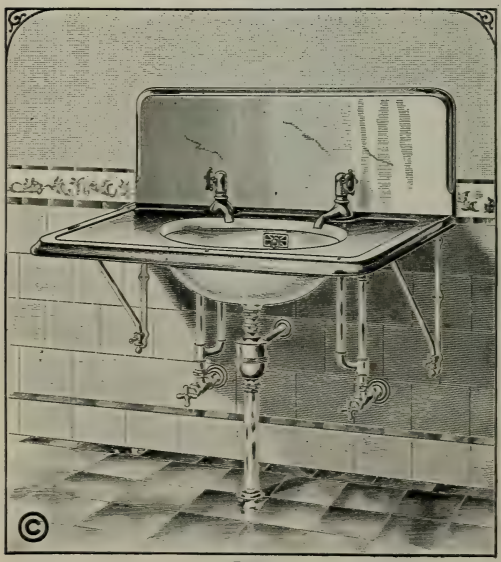
R-57. Lavatory. Italian Marble Slab, 22 x 32 inches, 12-inch Back, 15 x 19 Corinthian Basin with Removable Overflow Strainer, Nickel Plated No. 6 Fuller Basin Cocks, Supply Pipes with Air Chambers and Loose Key Valves, Nickel Plated Trap with Vent, and Offset Legs, complete, . . . $43.00

R-58. Complete as described, with Right Hand End, ... 43.00

R-59. Complete as described, with Left Hand End, ... 43.00

These Lavatories can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in Section T.

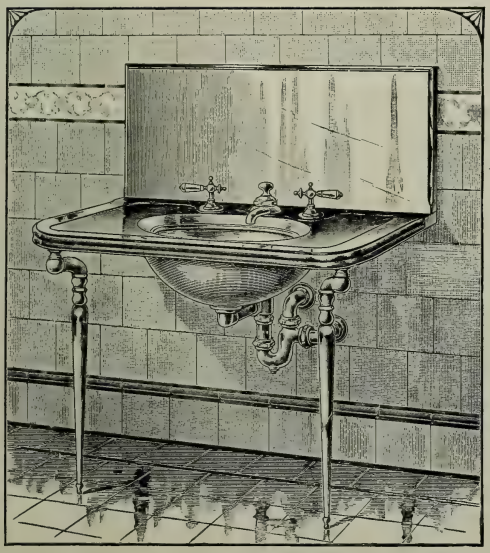


R-64.

R-64. Lavatory. Italian Marble Slab, 20 x 30 inches, 12-inch Back, 15 x 19 Corinthian Basin with Removable Overflow Strainer, Nickel Plated Low-down Broughton Self-closing Basin Cocks, Supply Pipes with Air Chambers and Loose Key Valves, Nickel Plated Trap with Vent, and Brackets, complete, ... $43.00

R-65. Complete as described, with Right Hand End, ... 43.00

R-66. Complete as described, with Left Hand End, ... 43.00



R-71.

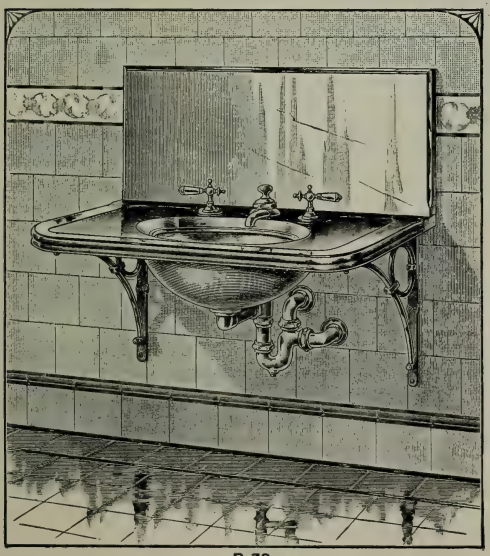
R-71. Lavatory. Italian Marble Slab, 24 x 32 inches, 14-inch Back, 15 x 19 Oval Basin, Nickel Plated "Corinthian" Combination Supply and Waste, Trap with Vent, Offset Legs, and N. P. Supports, complete, . $48.50

R-72. Complete, as described, with Right Hand End, ... 48.50

R-73. Complete, as described, with Left Hand End, ... 48.50

These Lavatories can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in section T.



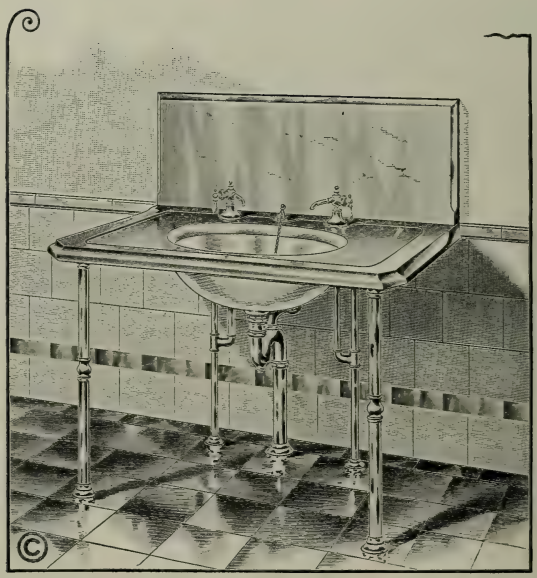
R-78.

R-78. Lavatory. Italian Marble Slab, 24 x 32 inches, 14-inch Back, 15 x 19 Oval Basin, Nickel Plated "Corinthian" Combination Supply and Waste, Trap with Vent, and Brackets, complete, ... $48.50

R-79. Complete, as described, with Right Hand End, ... 48.50

R-80. Complete, as described, with Left Hand End, ... 48.50

CLOW OPEN LAVATORIES.



R-85.

R-85. Italian Marble Slab, 20 x 30 inches, 1¼ inches thick, 12-inch Back, 14 x 17 Oval Patent Overflow Basin, Nickel Plated Plug and Chain, No. 0 Fuller Basin Cocks and Supplies with Air Chambers, Chain Stay, Nickel Plated Legs, and S-Trap with Vent. Price as described, ... $31.50

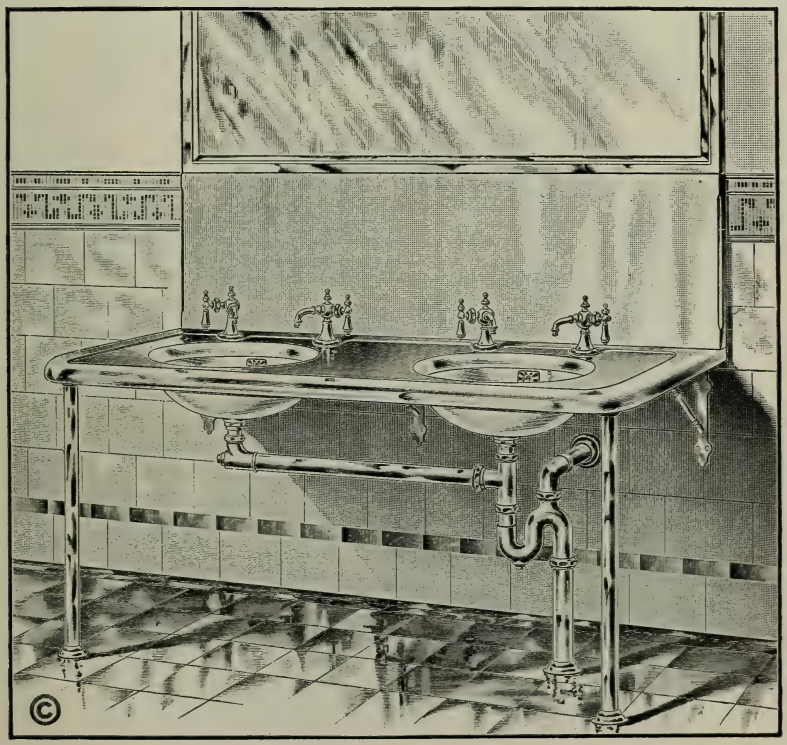
R-86. Complete as described, with Right Hand End, ... 31.50

R-87. Complete as described, with Left Hand End, ... 31.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in Section T.

CLOW OPEN LAVATORIES.



R-89.

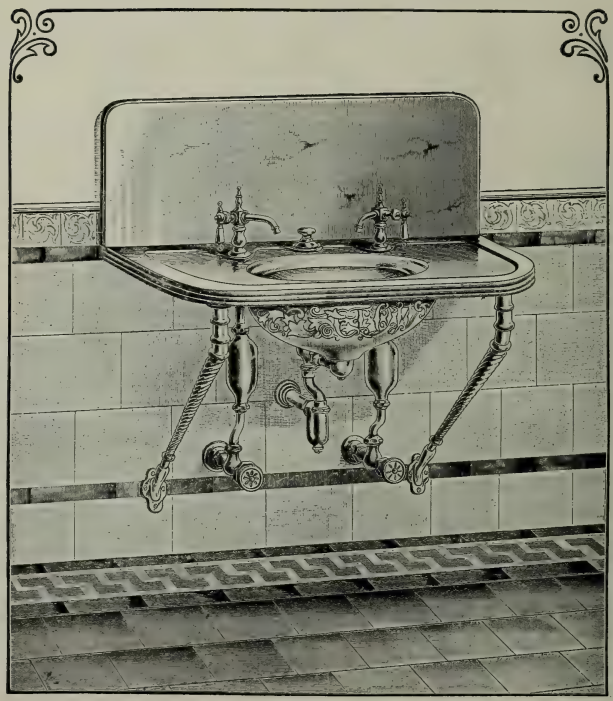
Italian Marble Slab, 24x54 inches, 16-inch Back, Two 14x17-inch Corinthian Bowls, No. 9 N. P. Fuller Basin Cocks, Combination Adjustable N. P. Brass Brackets and Legs, Center Bracket, 1¼-inch N. P. Continuous Waste and 1¼-inch N. P. S-Trap with Vent and Waste to floor. Price, complete as described, ... $73.50

Beveled Plate Glass Mirror in N. P. Brass Frame, 30x54 inches, extra 45.00

This Lavatory can be furnished with any number of Bowls desired. Prices on application.

The Combination Leg Bracket, shown with this Lavatory, not only gives the firmest possible support to the Slab but its use greatly facilitates the setting up of fixtures. In case the Slab should not be set quite true, or the floor quite level, the discrepancy may be overcome by turning the Adjustable Flange up or down.

CLOW OPEN LAVATORIES.



R-92.

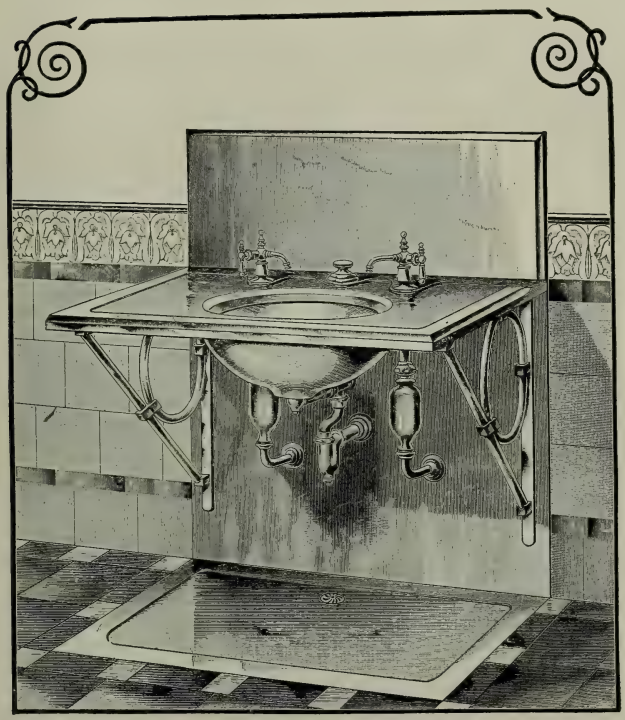
R-92. Italian Marble Slab 22 x 32 inches, 1¼ inches thick, 14-inch Back, 15 x 19 Oval Embossed Basin, Nickel Plated Ideal Basin Waste, No. 4 Fuller Basin Cocks, Heavy Cast Brass Brackets, Trap with Waste, and Supply Pipes with Bell Air Chambers and Stop Valves. Price, as described, - - - - - - $50.50

Shell Soap Cup cut in Marble, extra, - - - - - - - - - - - - - - - - 3.00

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings are shown in section T.

CLOW OPEN LAVATORIES.



R-108.

R-108. Italian Marble Slab 22 x 32 inches, 1¼ inches thick, 14-inch Back, 15 x 19-inch Oval Basin, Nickel Plated Ideal Basin Waste, No. 3 Fuller Basin Cocks, Cast Brass Brackets, Trap with Waste, and Supply Pipes with Bell Air Chambers. Price, as described, - - - - - - - - - - - - - - $44.00

R-109. Complete as described, with Right Hand End, - - - - - - - - - - - - - - 44.00

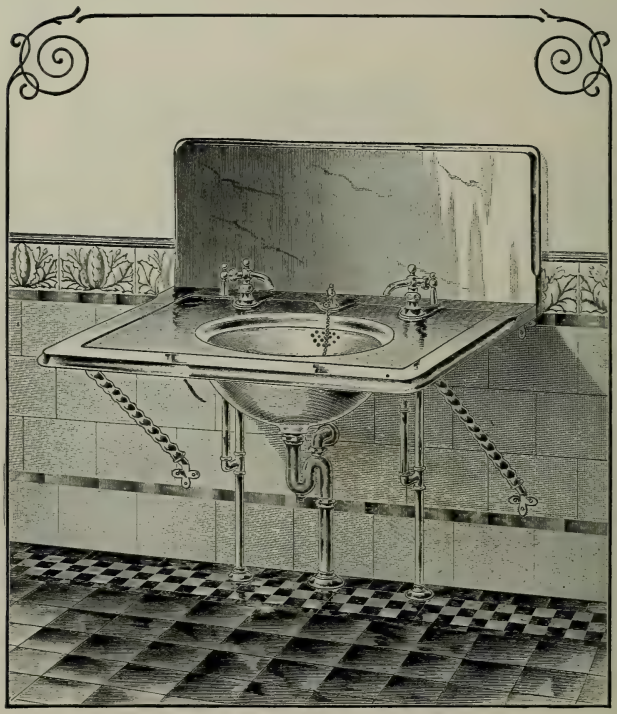
R-110. Complete as described, with Left Hand End, - - - - - - - - - - - - - - 44.00

Add for countersunk Italian Marble Floor Slab, 22 x 32 inches, 1¼ inches thick, - - - - - - - 7.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in section T.

CLOW OPEN LAVATORIES.



R-115.

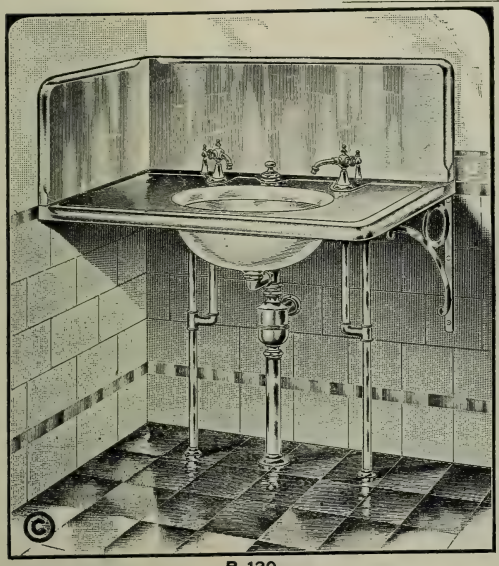
R-115. Italian Marble Slab, 20 x 30 inches, 1¼ inches thick, 14-inch Back, 14 x 17-inch Oval Basin, Nickel Plated No. 6 Fuller Basin Cocks, Chain Stay and Chain, Brackets, S-Trap with Vent, and Supply Pipes with Air Chambers. Price, as described, ... $30.50

R-116. Complete as described, with Right Hand End, ... 30.50

R-117. Complete as described, with Left Hand End, ... 30.50

This Lavatory can be furnished in any American or Foreign Marble, Onyx or Jasper, and in any size required.

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown in Section T.

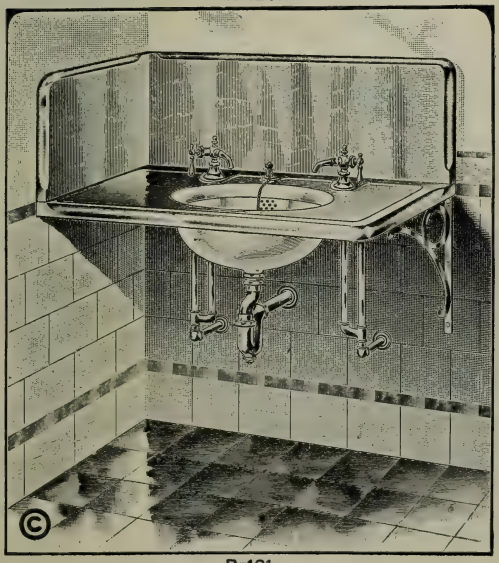


R-120.

R-120. Italian Marble Slab, 20 x 30 inches, 1¼ inches thick, 12-inch Back and Left Hand End, 14 x 17 Oval Basin, Nickel Plated Ideal Waste, Trap with Vent, No. 9 Fuller Basin Cocks with Metal Handles, Supplies and Air Chambers, Bracket, Angle Supports and Basin Clamps.

Price, - - - - - - - - $37.00

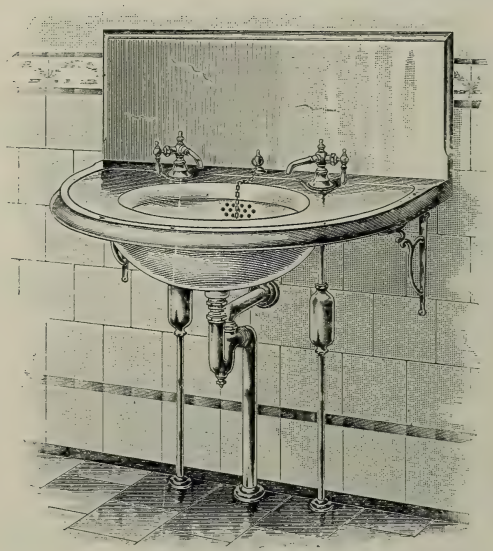
Soap Cups, Towel Racks and other **Bath and Lavatory Trimmings** are shown in Section **T.**



R-121.

R-121. Italian Marble Slab, 20 x 30 inches, 1¼ inches thick, 12-inch Back and Left Hand End, 14 x 17 Oval Basin, Trap with T-Vent Connection, No. 0 Fuller Basin Cocks, Supplies and Air Chambers, Bracket, Angle Supports, Chain Stay, Chain and Basin Clamps.

Price, - - - - - - - - $33.25

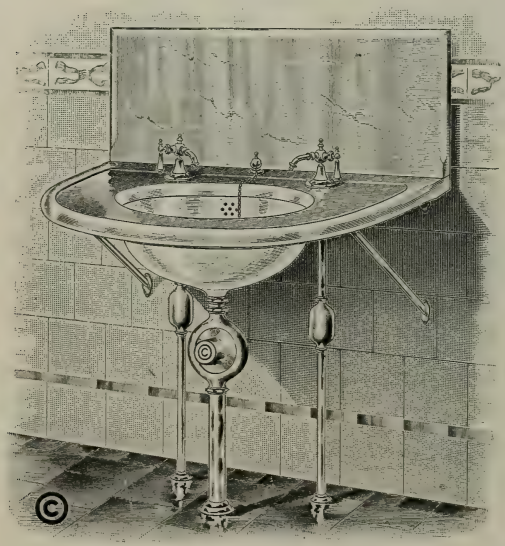


R-122

R-122. Italian Marble Slab, 20x30 inches, 12-inch Back, 14x17-inch Oval Basin, Nickel Plated No. 0 Fuller Basin Cocks, Supplies with Air Chambers, Trap with Vent, Chain Stay, Chain, Brackets and Basin Clamps.

Price, - - - - - - - - $31.00

Soap Cups, Towel Racks and other Bath and Lavatory Trimmings are shown in Section T

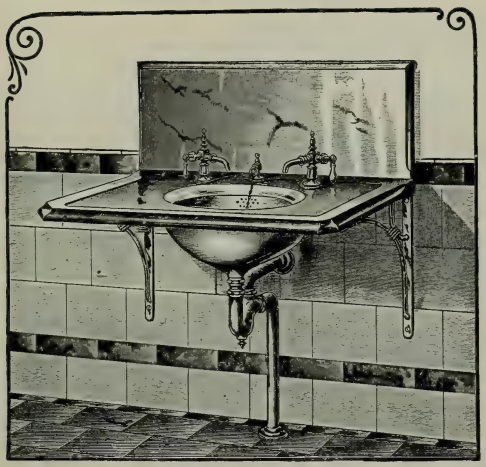


R-123

R-123. Italian Marble Slab, 20x30 inches, 12-inch Back, 14x17-inch Oval Basin, Nickel Plated No. 9 Fuller Basin Cocks with Metal Handles, Supplies with Air Chambers, Anti-Siphon Trap, Chain Stay and Chain, Brackets and Basin Clamps.

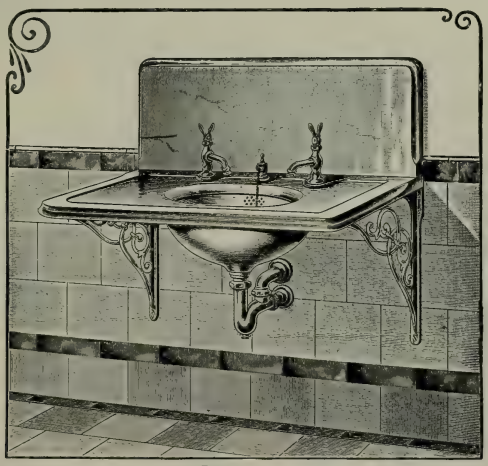
Price, - - - - - - - - $38.25

CLOW OPEN LAVATORIES.



R-129.

Italian Marble Slab 20x24 inches, 1¼ inches thick, 10-inch Back, 14x17-inch Oval Patent Overflow Basin, Nickel Plated Metal Plug with Rubber Stopper, Nickel Plated S-Trap, No 1 Fuller Basin Cocks, Chain Stay and Chain, and Nickel Plated Steel Brackets. Price as described, - - - - - - - - - - - - $19.50

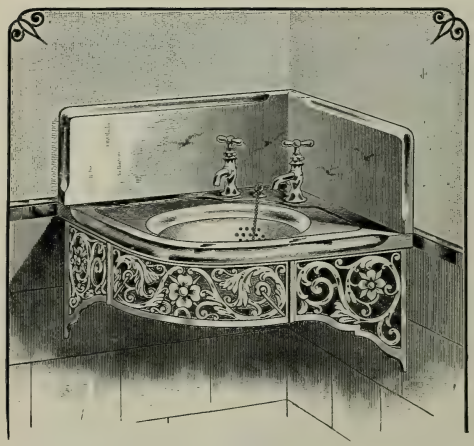


R-136.

Italian Marble Slab 20x24 inches, 1¼ inches thick, 10-inch Back, 14x17-inch Oval Patent Overflow Basin, Nickel Plated Metal Plug with Rubber Stopper, Doherty Self-closing Basin Cocks, Chain Stay and Chain, P-Trap with Vent, and Enameled Iron Brackets. Price as described, - - - - - - - - - - - $21.00

If with No. 2 Fuller Basin Cocks, deduct - - - - - - - - - - - - 1.50

These Lavatories can be furnished with Right or Left Hand Ends, and in any size required.



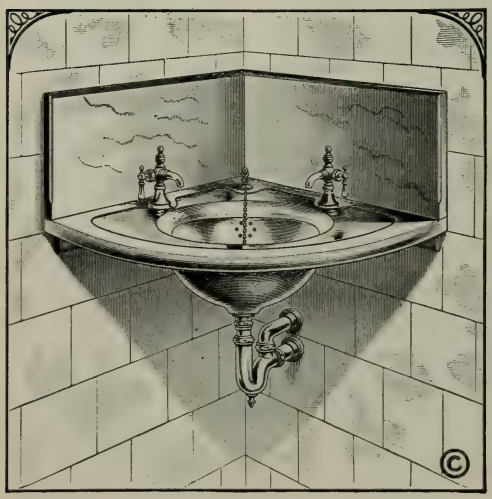
R-139.

R-139. Italian Marble Corner Slab, 20 x 20 inches, 1¼ inches thick, 12-inch Backs, 14-inch Round Patent Overflow Basin, Enameled Iron Apron and Brackets, N. P. Self-closing Basin Cocks, Chain Stay and Chain.

Price, as described, - - - - - - $21.00

R-140. Same as above, with 22 x 22-inch Slab, 22.50

When desired, we furnish the above Lavatories with Fuller or Compression Basin Cocks, but as they are generally used in public buildings, we recommend Self-closing Cocks.



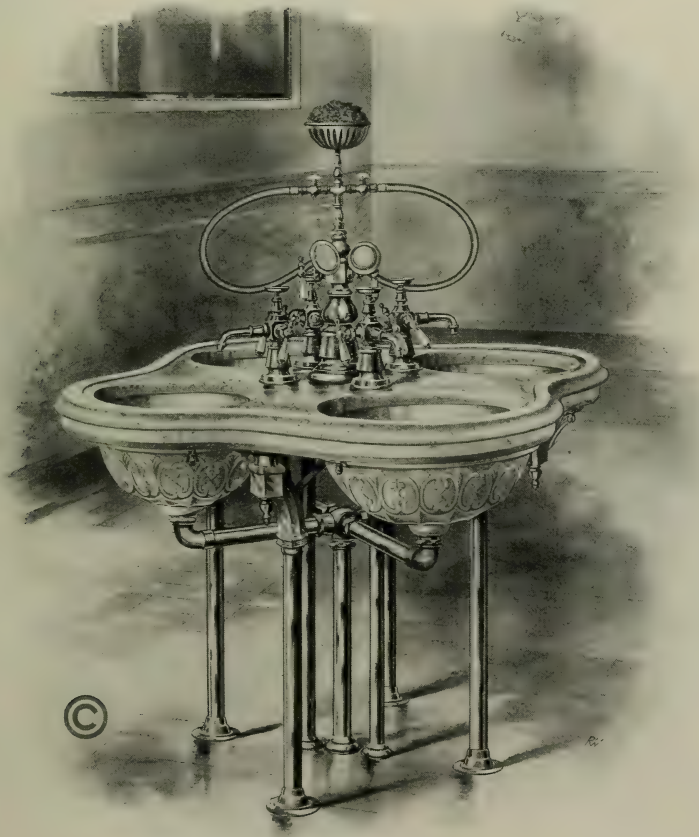
R-141.

R-141. Italian Marble Corner Slab, 22 x 22 inches, 1¼ inches thick, 12-inch Backs, 14 x 17 Oval Patent Overflow Basin, N. P. Brass P-Trap with Vent, No. 0 Fuller Basin Cocks, Chain Stay and Chain.

Price, as described, - - - - - - $22.00

The above Lavatories can be furnished in any American or Foreign Marble.

CLOW FOUR-BOWL BARBER LAVATORY.



R-147.

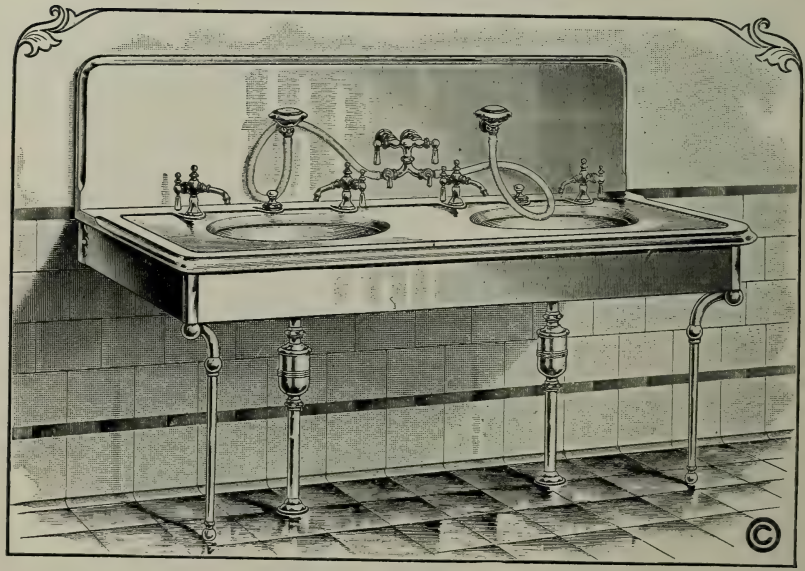
Clow Four-Bowl Barber Lavatory with Tennessee Marble Slab 3 feet 6 inches x 3 feet 6 inches, and 2½ inches thick, fitted with four oval Embossed Bowls, 14 x 17 inches, with Patent Overflows and Metal Plugs, Clow Universal Supplies, Fuller Combination Faucets with Ebony Handles, Special Fuller Combination Shampoo Cocks, Shampoo Sprinkler with Rubber Ring, Rubber tubing to Shampoo Supply Cocks, N. P. Sponge Holder, special receding N. P. Cast Brass Legs, single N. P. Waste, Clamps, Braces and Bolts.

Price, complete as described and shown, ... **$190.00**

Furnished in Italian Marble, if preferred, at same price.

This is an excellent, convenient and practical fixture for Barber Shops, Hotels, etc. The Combination Waste has a single discharge pipe which empties into a Drum Trap with N. P. Trap Screw, beneath the floor.

CLOW BARBER LAVATORIES.

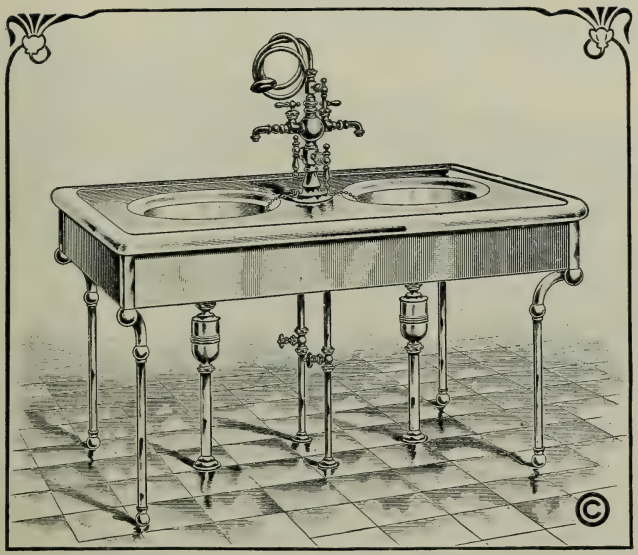


R-149.

R-149. Italian Marble Slab 22 x 48 inches, 1¼ inches thick, 16-inch Back, 5-inch Apron, 15 x 19-inch Oval Basins, Nickel Plated Ideal Basin Waste, No. 9 Fuller Basin Cocks, Double Shampoo Cock with Hose and Sprinklers, Recessed Legs with Apron Holders and Traps. Complete as described, - - - - - - - - $75.50

If with ⅜-inch Nickel Plated Supplies, T-49, add - - - - - - - - - - - - - - - 7.50

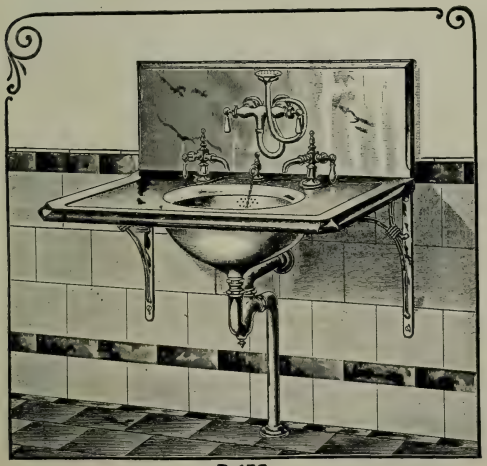
CLOW BARBER LAVATORIES.



R-152.

Italian Marble Slab, 48x24 inches, with 5-inch Aprons, 14x17-inch Oval Basins, Nickel Plated Traps, Combination Double Basin and Shampoo Cock, with Hose and Sprinkler, Supplies with Stops, Recessed Legs, with Braces, and Basin Clamps.

Price - $75.00



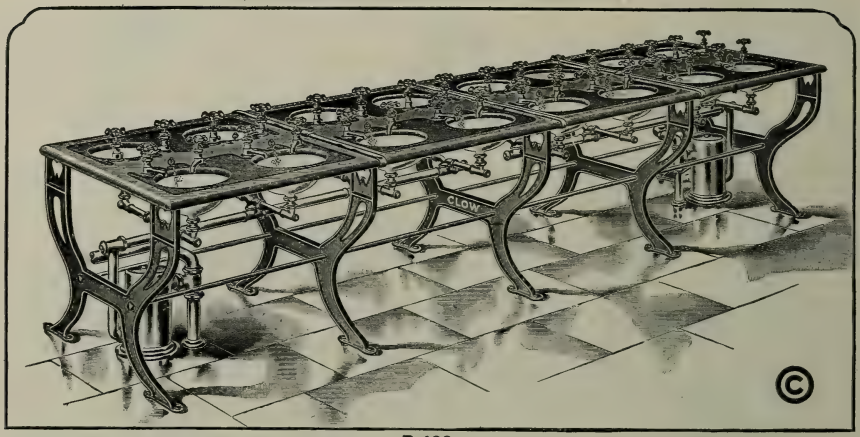
R-153.

R-153. Italian Marble Slab, 20x24 inches, 1¼ inch thick, 14-inch Back, 14x17-inch Oval Basin, Nickel Plated Trap, No. 0 Fuller Basin Cocks, Special Fuller Shampoo Cock, with Hose and Sprinkler, Nickel Plated Steel Brackets, and Basin Clamps.

Price - - - - - - - - $27.50

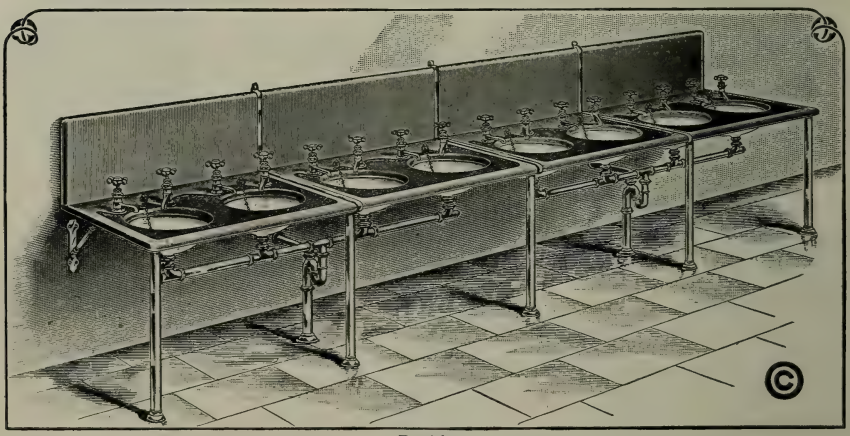
CLOW OPEN LAVATORIES.

GOVERNMENT AND PUBLIC BUILDINGS.



R-160.

Double Slate Lavatory, 48 inches wide, 16 feet long, 1½ inches thick, Countersunk and Moulded Edges connected with Nickel Plated Brass Union Strips and supported on Galvanized Iron Standards, 14x17-inch Oval Basin and Basin Clamps, Clow Patent Nickel Plated Self-closing Cocks with China Centers, Nickel Plated Chain Stays and Chains, Patent Overflow Plugs with Rubber Stoppers, 2-inch Nickel Plated Continuous Waste and Traps, 2½-inch Waste and 2-inch Vent with Flanges complete. Prices on Application.



R-163.

Slate Lavatory, 24 inches wide, 16 feet long, 1½ inches thick, Countersunk and Moulded Edges, 14-inch Back 1 inch thick with Moulded Edges, connected with Nickel Plated Combination Union Strips, Brackets and Adjustable Legs, 14x17-inch Oval Basin and Basin Clamps, Clow Patent Nickel Plated Self-closing Cocks with China Centers, Nickel Plated Chain Stays and Chains, Patent Overflow Plugs with Rubber Stoppers, Nickel Plated 1½-inch Continuous Waste and 2-inch Traps, Waste to floor and Vent to wall, with Flanges complete.

Prices on Application.

CLOW STANDARD U. S. NAVAL LAVATORY.



R-168.

Adamantose Basin, Ewer and Slop Jar with Nickel Plated Brass Rings and Catches, Basin Plug and Stopper. Prices upon application.

Trimmings:

Mirror, Beveled Edge Plate Glass, with Nickel Plated Brass Frame 24 x 18 inches, Glass Carafe and Tumbler with Nickel Plated Spring Holders, China Tooth Brush, Vase and Soap Cup with Nickel Plated Spring Holders, Nickel Plated Brush and Comb Holder, and Folding Towel Bars. Price, ... $37.25

CLOW ENAMELED IRON SECTIONAL LAVATORIES.

WITH LIPPED BASINS.



R-304.

Enameled Iron Sectional Double Lavatory, with eight Oval Lipped Basins on Painted Iron Frame, Nickel Plated Brass Removable Overflow Strainers, Chains, Plugs with Rubber Stoppers, Broughton Self-closing Basin Cocks, Union Strips, 1¼-inch Connected Waste and Anti-Siphon Sanitary Trap.

DIMENSIONS

Each Section, 18x24 inches; Basins, 12x15 inches.

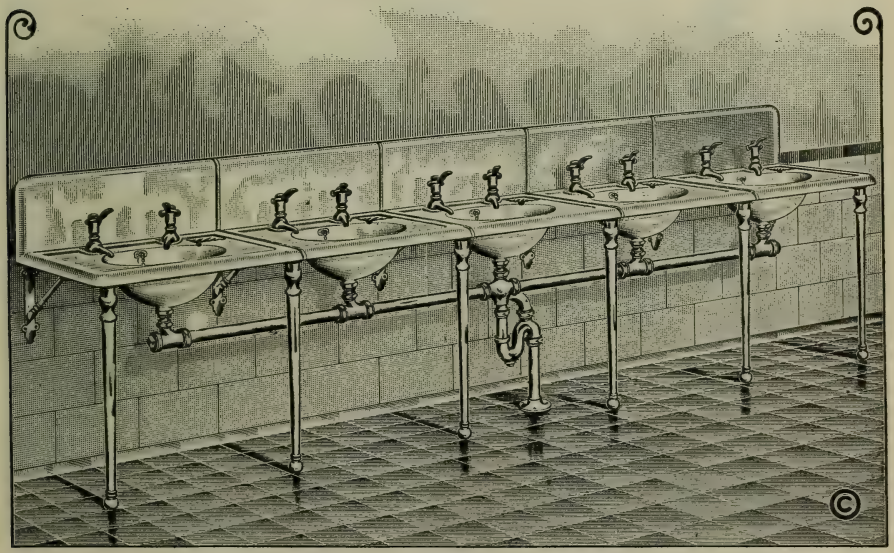
	Enameled.	Galvanized.
Price, complete as shown and described,	$204.00	$204.00
Add or deduct for each complete Double Section, down to two sections,	45.00	45.00

The lipped or overhanging basin prevents the water from surging over sides.

These Lavatories are thoroughly sanitary in every respect and are recommended for use in Public Buildings. Any number of Sections can be furnished.

CLOW ENAMELED IRON SECTIONAL LAVATORIES.

WITH LIPPED BASINS.



R-310.

Enameled Iron Sectional Lavatory with Backs and five Oval Lipped Basins on Iron Leg Brackets, Nickel Plated Brass Removable Overflow Strainers, Chains, Plugs with Rubber Stoppers, Broughton Self-closing Basin Cocks, Union Strips, 1¼-inch Connected Waste and 2-inch Trap.

DIMENSIONS.

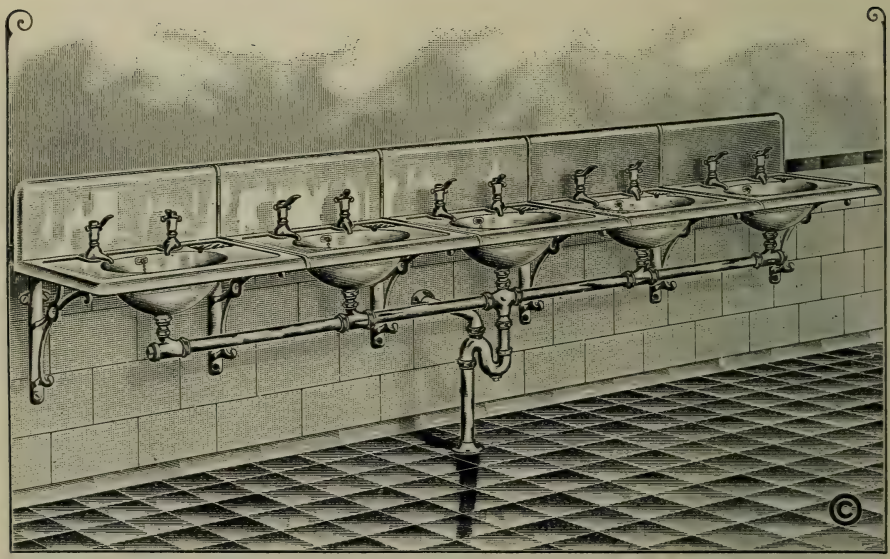
Each Section, 18x24 inches; Basins, 12x15 inches; Height of Back, 10 inches.

	Enameled	Galvanized
Price, complete as shown and described,	$157.00	$157.00
Add or deduct for each complete Section down to two sections,	29.00	29.00
If with right or left hand ends, add,	2.00	2.00

The lipped or overhanging basin prevents the water from surging over sides.

CLOW ENAMELED IRON SECTIONAL LAVATORIES.

WITH LIPPED BASINS.



R-316.

Enameled Iron Sectional Lavatory with Backs and five Oval Lipped Basins on heavy iron Brackets, Nickel Plated Brass Removable Overflow Strainers, Chains, Plugs with Rubber Stoppers, Broughton Self-closing Basin Cocks, Union Strips, 1¼-inch Connected Waste and 2-inch Trap.

DIMENSIONS.

Each Section, 18x24 inches; Basins, 12x15 inches; Height of Back, 10 inches.

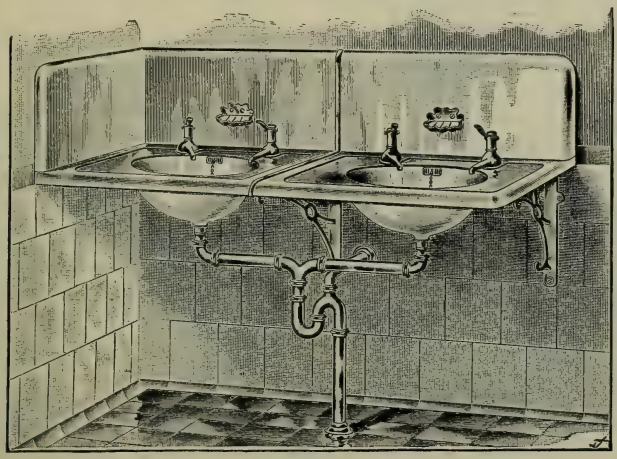
	Enameled.	Galvanized
Price, complete as shown and described,	$147.50	$147.50
Add or deduct for each complete Section down to two sections,	28.50	28.50
If with right or left hand end piece, add,	2.00	2.00

The lipped or overhanging basin prevents the water from surging over sides.

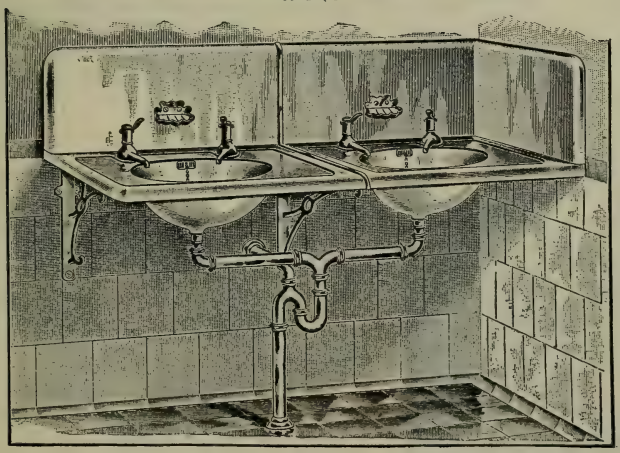
For single part lipped lavatories see page 660.

CLOW ENAMELED IRON SECTIONAL LAVATORIES.

WITH LIPPED BASINS.



R-321.



R-322.

Enameled Iron Sectional Lavatory with Backs and End, Two Oval Lipped Basins, heavy Iron Brackets, Nickel Plated Brass Removable Overflow Strainers, Chains, Plugs with Rubber Stoppers, Broughton Self-closing Basin Cocks, Union Strip, Connected Waste and 1¼-inch S Trap.

DIMENSIONS—Each Section, 18x24 inches; Basin, 12x15 inches; Height of Back, 10 inches.

Price, complete as shown and described, either R-321 or R-322, - - - - - - - - - - - - $64.00
For additional middle sections, add - 28.50



R-325.

R-325. Enameled Iron Lavatory with Back and Right Hand End, Oval Lipped Basin and Bracket, Nickel Plated Brass Removable Overflow Strainer, Chain, Plug with Rubber Stopper, Broughton Self-Closing Basin Cocks and 1¼-inch P Trap.

DIMENSIONS—Slab, 18x24 inches; Basin, 12x15 inches; Height of Back, 10 inches.

Price, complete as shown and described, ... $28.50



R-328.

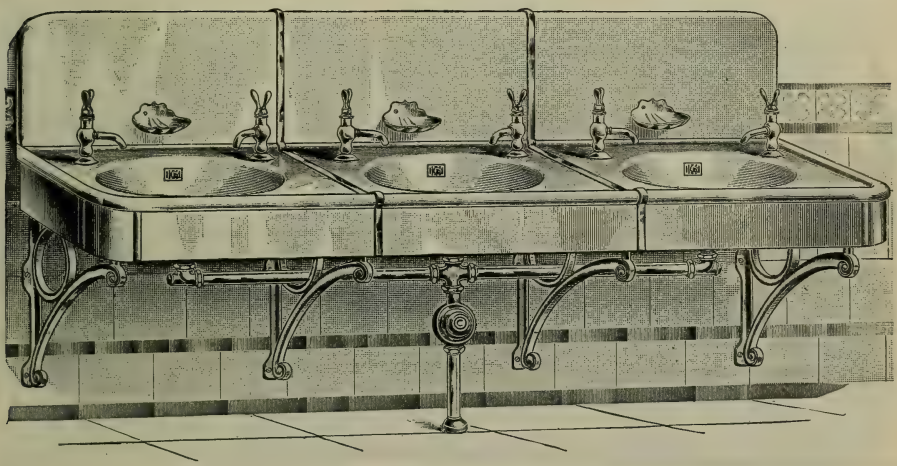
R-328. Enameled Iron Lavatory with Back and Left Hand End, Oval Lipped Basin and Bracket, Nickel Plated Brass Removable Overflow Strainer, Chain, Plug with Rubber Stopper, Broughton Self-Closing Basin Cocks and 1¼-inch P Trap.

DIMENSIONS—Slab, 18x24 inches; Basin, 12x15 inches; Height of Back, 10 inches.

Price, complete as shown and described, ... $28.50

The lipped or overhanging basin prevents the water from surging over the sides. For sectional lipped lavatories, see pages 656, 657 and 658.

CLOW ENAMELED IRON SECTIONAL LAVATORIES.



R-332.

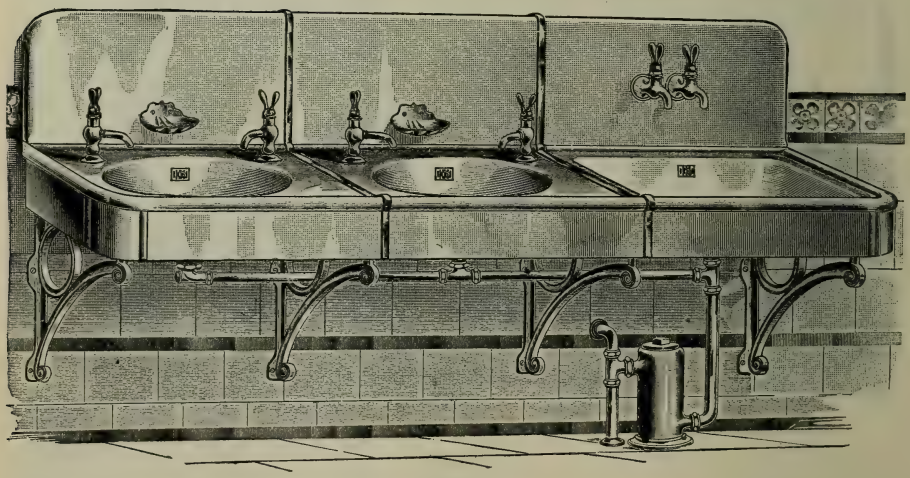
Enameled Iron Sectional Lavatory with Backs and three Oval Basins, Aprons and Brackets, Nickel Plated Removable Brass Overflow Strainers, Chains, Plugs with Rubber Stoppers, Doherty Self-closing Basin Cocks, Soap Cups, Union Strips, Connected Waste and Anti-siphon Sanitary Trap.

DIMENSIONS—Each Section, 18x14 inches; Basins, 12x15 inches; height of Back, 12 inches.

Price, complete as shown and described,	$73.00
Add or deduct for each complete Section	20.00
If with right or left hand End Piece, add	2.00

CLOW ENAMELED IRON SECTIONAL LAVATORIES.

WITH SINK.

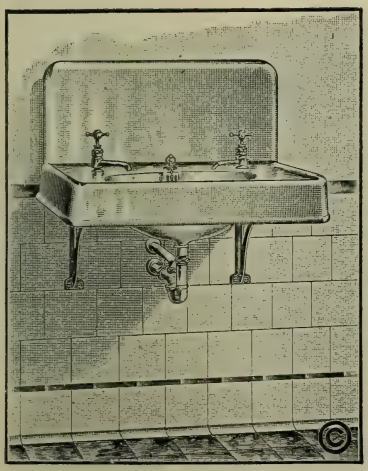


R-334.

Enameled Iron Sectional Lavatory with Backs, two Oval Basins and Sink on End, Aprons and Brackets, Nickel Plated Removable Brass Overflow Strainers, Chains, Plugs with Rubber Stoppers, Doherty Self-closing Basin Cocks and Sink Bibbs, Soap Cups, Union Strips, Connected Waste and Clow Sanitary Grease Trap.

DIMENSIONS—Each Section, 18x24 inches; Basins, 12x15 inches; Sink, 18x24 inches; Backs, 12 inches high.

Price, complete as shown and described,	$88.00
Add or deduct for each complete Section,	20.00
If with right or left hand End-piece, add	2.00

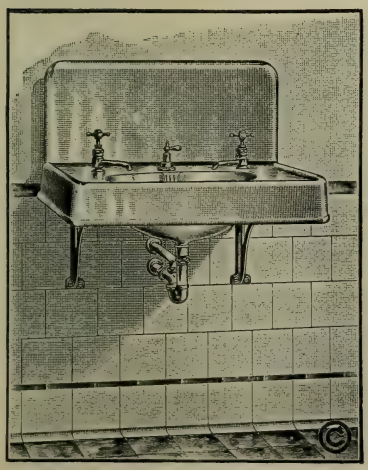


R-338.

R-338. Enameled Iron Lavatory with Back, Bowl, Patent Overflow and Apron cast in one piece, Enameled Brackets, Nickel Plated Brass Plug and Coupling with Rubber Stopper, Chain Stay and Chain, Low-Down Compression Basin Cocks with China Centers marked "Hot" and "Cold," and 1¼-inch P Trap.

DIMENSIONS—Size of Slab, 18x24 inches; Basin, 12x15 inches; Back, 12 inches high.

Price, complete as shown and described, ... $22.50
If Enameled Outside, add 3.50



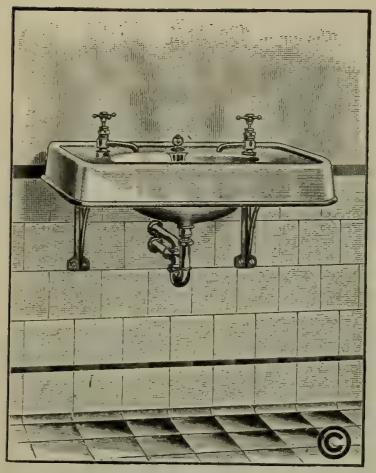
R-339.

R-339. Enameled Iron Lavatory with Back, Bowl, Patent Overflow and Apron cast in one piece, Enameled Brackets, Nickel Plated Special C Waste, Low-Down Compression Basin Cocks with China Centers marked "Hot" and "Cold," and 1¼-inch P Trap.

DIMENSIONS—Size of Slab, 18x24 inches; Basin, 12x15 inches; Back, 12 inches high.

Price, complete as shown and described, ... $27.50
If Enameled Outside, add 3.50

The Special C Waste is operated by turning the handle to the right or left, which raises or lowers the Basin Stopper. It is a very efficient and sanitary fixture.

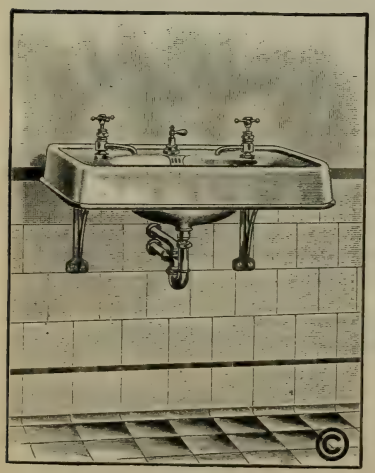


R-346.

R-346. Enameled Iron Lavatory with Bowl, Patent Overflow and Apron on four sides cast in one piece, Enameled Brackets, Nickel Plated Brass Plug and Coupling with Rubber Stopper, Chain Stay and Chain, Low-down Compression Basin Cocks with China Centers, marked "Hot" and "Cold," and 1¼-inch P Trap.

DIMENSIONS—Size of Slab, 18x24 inches; Basin, 12x15 inches.

Price, complete as shown and described,	$20.00
If Enameled Outside, add,	3.50



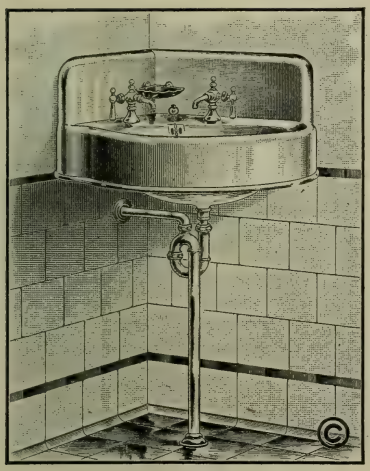
R-347.

R-347. Enameled Iron Lavatory with Bowl, Patent Overflow and Apron on four sides cast in one piece, Enameled Brackets, Nickel Plated Special C Waste, Low-down Compression Basin Cocks with China Centers marked "Hot" and "Cold," and 1¼-inch P Trap.

PRICES AND DIMENSIONS.

Size of Slabs,	20x24	22x27
Price, complete as shown and described,	$26.00	$28.50
If Enameled Outside, add	3.50	

These Lavatories are designed for use on marble or tile wainscoting, the Brackets being fitted to allow a space of 1½ inches between wall and rear apron.

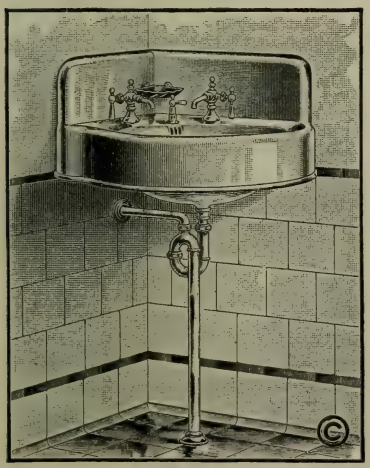


R-358.

R-358. Enameled Iron Lavatory with Back, Patent Overflow and Apron cast in one piece, Nickel Plated Brass Plug and Coupling with Rubber Stopper, Chain Stay and Chain, Number O Fuller Basin Cocks and 1¼-inch S Trap.

DIMENSIONS—Length on Side, 16 inches; Bowl, 11x14 inches; Height of Back, 6 inches.

Price, complete as shown and described, ... $16.75
If Enameled Outside, add 3.00



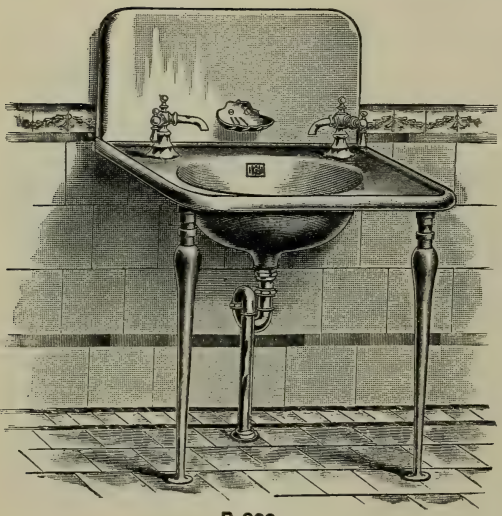
R-359.

R-359. Enameled Iron Lavatory with Back, Patent Overflow and Apron cast in one piece, Nickel Plated Special C Waste, Number O Fuller Basin Cocks and 1¼-inch S Trap.

DIMENSIONS—Length on Side, 16 inches; Bowl, 11x14 inches; Height of Back, 6 inches.

Price, complete as shown and described, ... $21.75
If Enameled Outside, add 3.00

The Special C Waste is operated by turning the handle to the right or left, which raises or lowers the Basin Stopper. It is a very efficient and sanitary fixture.

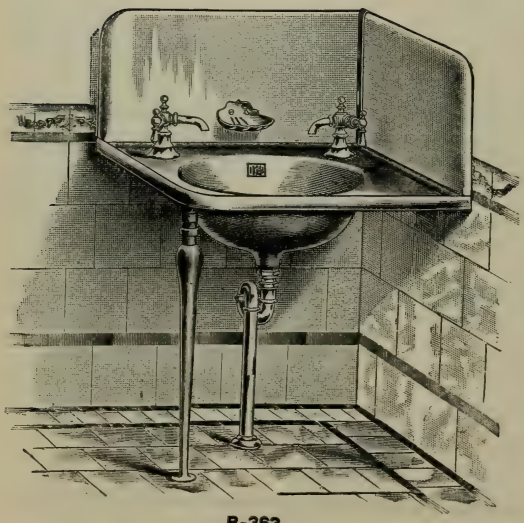


R-362.

R-362. Enameled Iron Lavatory with 12-inch Enameled Iron Back, Oval Basin with Nickel Plated Removable Brass Overflow Strainer, Chain, Plug and Rubber Stopper, Iron Legs, Nickel Plated Soap Cup, No. 0 Fuller Basin Cocks and 1¼ S Trap. Exterior and Legs Bronzed.

Size of Slab,	Inches, 18 x 24
Size of Basin,	Inches, 12 x 15
Price, as described,	$18.75
If Enameled Outside and Enameled Legs, add	5.00

Soap Cups, Towel Racks and other Bath Room and Lavatory Trimmings shown on pages 763 to 769.



R-363.

R-363. Enameled Iron Lavatory with 12-inch Enameled Iron Back and Right Hand End, Oval Basin with Nickel Plated Removable Brass Overflow Strainer, Chain, Plug and Rubber Stopper, Iron Legs, Nickel Plated Soap Cup, No. 0 Fuller Basin Cocks and 1¼ S Trap. Exterior and Leg Bronzed.

Size of Slab,	Inches, 18 x 24
Size of Basin,	Inches, 12 x 15
Price, as described,	$20.75
If Enameled Outside and Enameled Leg, add	4.25

Can be furnished with Right Hand End if desired.



R-366.

R-366. Enameled Iron Lavatory with Back, Bowl and Patent Overflow cast in one piece, complete with Bronzed Brackets, Nickel Plated Brass Plug and Coupling with Rubber Stopper, Chain Stay and Chain, Number O Fuller Basin Cocks and 1¼-inch S Trap.

DIMENSIONS—Slab, 18x24 inches; Basin, 12x15 inches; Height of Back, 12 inches.

Price, complete as shown and described, . . . $18.75
If Enameled Outside and Enameled Brackets, add . . 4.00



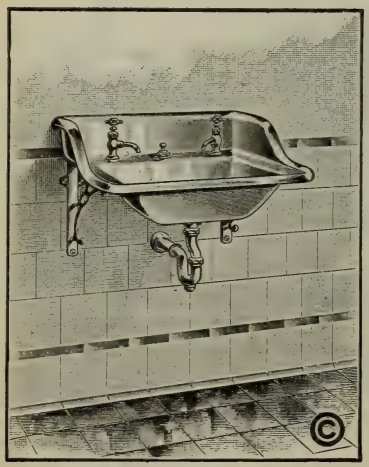
R-367.

R-367. Enameled Iron Lavatory with Back, Bowl and Patent Overflow cast in one piece, Bronzed Brackets, Nickel Plated Special C Waste, Number O Fuller Basin Cocks and 1¼-inch S Trap.

DIMENSIONS—Slab, 18x24 inches; Basin, 12x15 inches; Height of back, 12 inches.

Price, complete as shown and described, . . . $23.50
If Enameled Outside and Enameled Brackets, add . . 4.00

The Special C Waste is operated by turning the handle to the right or left, which raises or lowers the Basin Stopper. It is a very efficient and sanitary fixture.



R-371.

R-371. Enameled Iron Lavatory with Back and Square Round Cornered Bowl cast in one piece. Complete with Bronzed Brackets; Nickel Plated Ideal Waste, Clow Self-Closing Basin Cocks and 1¼-inch Offset P Trap.

DIMENSIONS—Slab, 18x24 inches; Bowl, 11x16 inches.

Price, complete as shown and described, ... $27.75
If Enameled Outside and Enameled Brackets, add . 3.00



R-373.

R-373. Enameled Iron Lavatory with Oval Bowl cast in one piece. Complete with Enameled Back and Bronzed Brackets; Nickel Plated Ideal Waste, Clow Self-Closing Basin Cocks and 1¼-inch Offset P Trap.

DIMENSIONS—Slab, 22x30 inches; Bowl, 13x15 inches; Height of Back, 12 inches.

Price, complete as shown and described, ... $32.25
If with Right or Left Hand End Piece, add . . 2.00
If Enameled Outside and Enameled Brackets, add . . 3.00

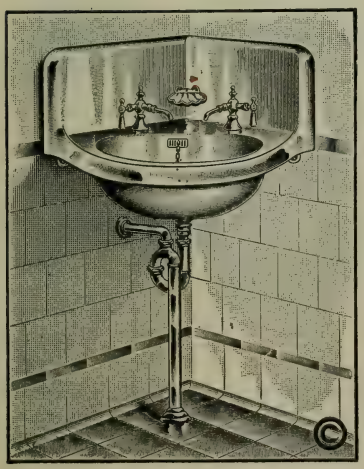


R-377

R-377. Enameled Inside and Outside Iron Roll-rim Lavatory with Back and Straight Back Basin cast in one piece, Enameled Brackets, Nickel Plated Brass Plug and Coupling with Rubber Stopper, Overflow and Chain, Soap Dish, Number O Fuller Basin Cocks and 1¼-inch P Trap.

DIMENSIONS—Length of Back, 24 inches; Front to Wall, 19 inches; Bowl, 12x15 inches; Height of Back, 10 inches.

Price, complete as shown and described, ... $21.25



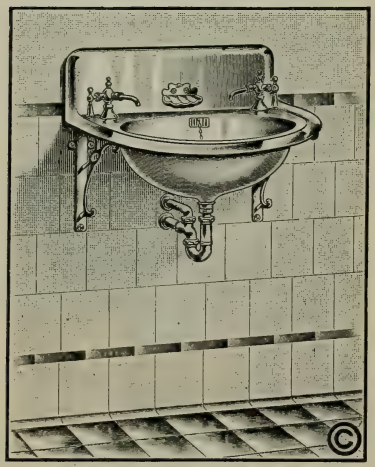
R-378.

R-378. Enameled Inside and Outside Iron Roll-rim Corner Lavatory with Back and Straight Back Basin cast in one piece, Nickel Plated Overflow Strainer, Plug with Coupling Chain and Rubber Stopper, Soap Dish, Number O Fuller Basin Cocks and 1¼-inch S Trap.

DIMENSIONS—Length of Sides, 20 inches; Front to Corner, 24 inches; Bowl, 12x15 inches; Height of Back, 10½ inches.

Price, complete as shown and described, ... $20.25

CLOW ENAMELED IRON LAVATORIES.



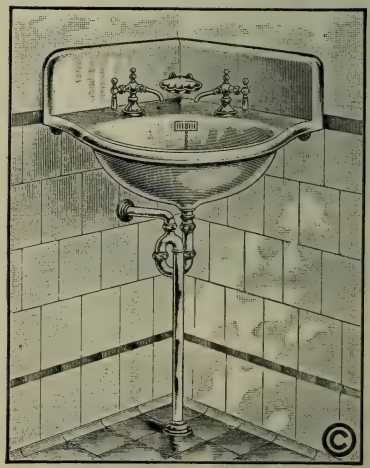
R-378.

Enameled Iron Combination Slab and Oval Basin with Nickel Plated Brass Removable Overflow Strainer, Chain, Plug with Rubber Stopper, Nickel Plated No. 0 Fuller Basin Cocks, Painted Iron Brackets and Nickel Plated Trap with Vent. Exterior Painted.

DIMENSIONS.

Length of Back, 19½ inches; Front to Back, 16½ inches; Basin, 11x14 inches; Height of Back, 6 inches.

Price, as described, - - - - - - - $14.00



R-379.

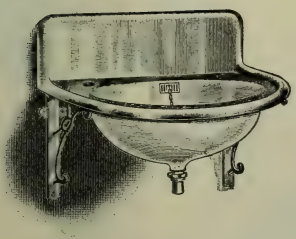
Enameled Iron Combined Corner Slab and Oval Basin with Nickel Plated Brass Removable Overflow Strainer, Chain, Plug with Rubber Stopper, Nickel Plated No. 0 Fuller Basin Cocks and Trap with Vent. Exterior Painted.

DIMENSIONS.

Length on Sides, 16 inches; Front to Back, 19½ inches; Basin, 11x14 inches; Height of Back, 6 inches.

Price, as described, - - - - - - - $13.50

CLOW ENAMELED IRON LAVATORIES.

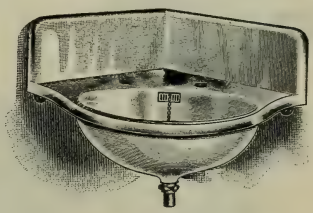


R-380.

Enameled Iron Combined Slab and Oval Basin, Painted Exterior, Nickel Plated Removable Brass Overflow Strainer, Plug with Rubber Stopper, Soap Dish, and Painted Brackets.

DIMENSIONS—Length of Back, 19½ inches; Bowl, 11 x 14 inches; Height of Back, 6 inches.

Price, as described, - - - - - - $8.00



R-381.

Enameled Iron Combined Corner Slab and Oval Basin, Painted Exterior, Nickel Plated Removable Brass Overflow Strainer, Plug with Rubber Stopper, and Soap Dish.

DIMENSIONS—Length on Side, 16 inches; Bowl, 11 x 14 inches; Height of Back, 6 inches.

Price, as described, - - - - - - $7.50



R-384.

Enameled Iron Combined Slab and Round Basin with Rolled Edge and Patent Overflow and Plug with Rubber Stopper. Painted Exterior.

DIMENSIONS—Length of Back, 13½ inches; Front to Back, 14 inches.

Price, as described, - - - - - - $4.00



R-385.

Enameled Iron Combined Corner Slab and Round Basin with Rolled Edge and Patent Overflow and Plug with Rubber Stopper. Painted Exterior.

DIMENSIONS—Length of Sides, 11½ inches; Front to Back, 17½ inches.

Price, as described, - - - - - - $4.00

CLOW'S ENAMELED IRON LAVATORIES.

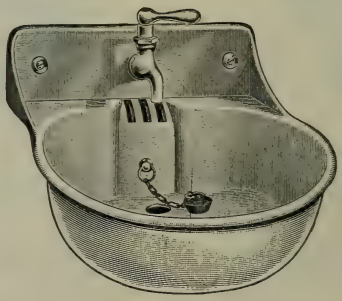


R-386.

Enameled Iron Combined Slab and Oval Basin on Standard, Nickel Plated Removable Brass Overflow Strainer, and Plug with Rubber Stopper. Exterior Painted.

DIMENSIONS—Length of back, 20 inches; Front to back, 16½ inches; Height to top of back, 33½ inches.

Price, as described, ... $9.50



R-387.

Description and Price on application.



R-388.

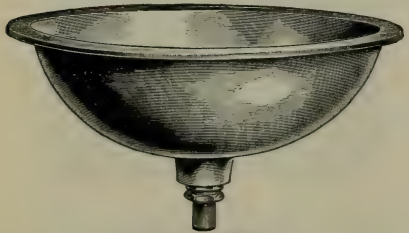
Enameled Iron Combined Corner Slab and Oval Basin on Standard, Nickel Plated Removable Brass Overflow Strainer, and Plug with Rubber Stopper. Exterior Painted.

DIMENSIONS—Length on sides, 15 inches; Front to back, 19½ inches; Height to top of back, 33½ inches.

Price, as described, ... $9.50

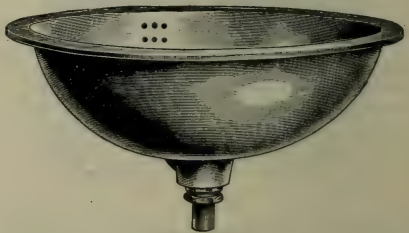
ENAMELED IRON BASINS.

PAINTED OUTSIDE.



R-391. ROUND.

Diameter over all.	No Overflow.	Patent Overflow.
12 inches,	$2.20	$2.40
14 inches,	2.40	2.80
16 inches,	3.00	3.60



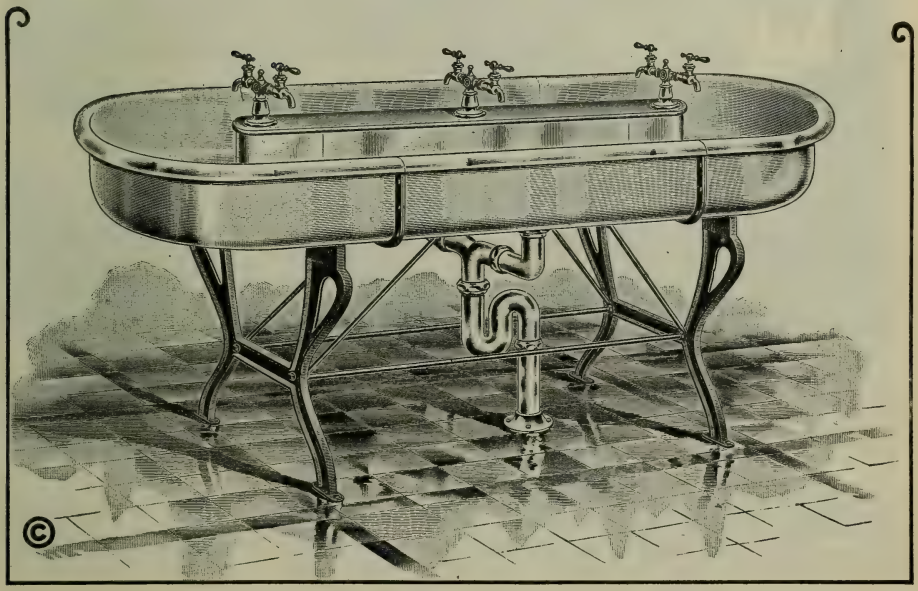
R-392. OVAL.

Diameter over all.	No Overflow.	Patent Overflow.
14 x 17 inches,	$3.00	$3.50
15 x 19 inches,	3.50	3.80

The above prices include nickel plated Brass Coupling and Rubber Stopper.

CLOW ENAMELED IRON DOUBLE SECTIONAL WASH SINK.

PATENTED.



R-398.

Enameled Iron Roll Rim Double Sectional Wash Sink on Iron Frame; complete with Nickel Plated Capping, Standards, Cocks, Standing Overflows, connected Waste and Trap.

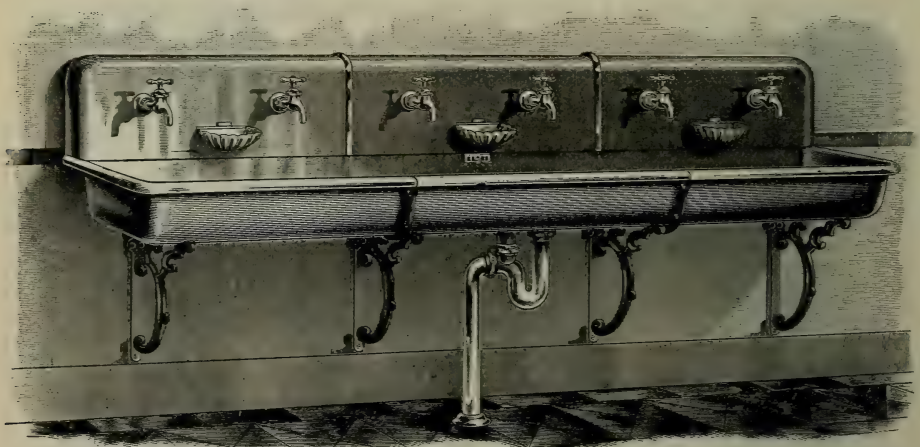
DIMENSIONS:—Extreme width of sink, 36 inches; Width of each trough inside, 14 inches; Depth of Trough, 8½ inches.

	PRICES.					
Length of Sink, Feet,	6	8	10	12	16	20
Number of Bibbs,	6	8	10	12	16	20
Price, complete, painted,	$73.00	$ 97.00	$120.00	$146.00	$194.00	$242.00
Price, complete, enameled,	97.00	130.00	159.00	192.00	255.00	317.00

If with Combination Hot and Cold Water Faucets, add, for each two feet, $4.00.

Sinks in 10-foot and 12-foot lengths have waste opening 3 inches to right of center.

CLOW'S ENAMELED ROLL-RIM CAST IRON WASH SINKS.

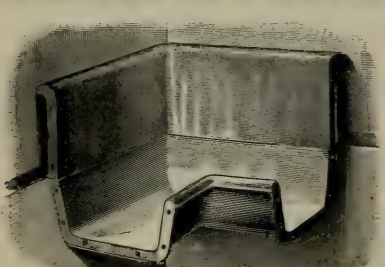


R-400.

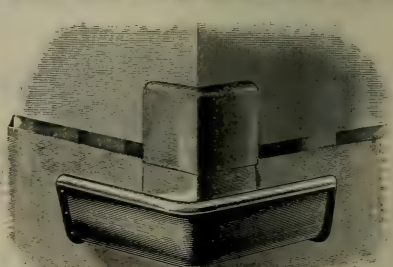
Enameled Iron Roll-rim Wash Sink, three-section (10 feet), Enameled Iron Back and Soap Cups, Painted Iron Brackets, Removable Brass Overflow Strainer, Brass Bibbs and 1¼-inch Rough Brass Trap with Vent. Exterior Painted.

DIMENSIONS—Width of trough, front to back, 18 inches; width inside, 14 inches; depth at outlet, 8¼ inches; height of back, 12 inches; depth of back, 2½ inches.

Length of Sink,	5 ft.	6 ft.	8 ft.	10 ft.	12 ft.	14 ft.	15 ft.	16 ft.	18 ft.	20 ft.	22 ft.	24 ft.
Number of Bibbs,	2	2	4	6	6	8	9	9	10	12	12	14
Price, Enameled,	$34.00	$39.40	$52.70	$66.00	$76.80	$90.10	$96.75	$102.15	$114.20	$127.50	$138.30	$151.60
Price, Galvanized,	33.00	38.20	51.10	64.00	74.40	87.30	93.75	98.95	110.60	123.50	133.90	146.80



R-401. CORNER SECTION (IN).



R-402. CORNER SECTION (OUT).

DIMENSIONS AND PRICES.

Length of R-401 on back, 4 ft., or 2 ft. from either end to corner. R-402 on front rim, 4 ft., or 2 ft. from either end to corner.

Add to R-400 for either R-401 or R-402 Galvanized, $34.00; Enameled, $36.00.

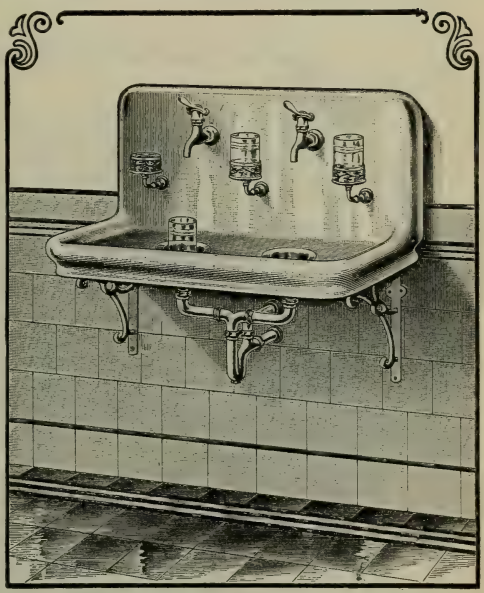
UNITY DRINKING FOUNTAINS.

(MADDEN'S PATENT.)

FOR SCHOOLS, HOTELS, INSTITUTIONS, RAILWAY STATIONS, ETC.



R-500. SINGLE.



R-503. DOUBLE.

American Porcelain Drinking Fountain with Slab and Back in one piece (Slab countersunk 1¼ inches), N. P. recessed Strainers with continuous Waste and Trap, Heavy N. P. Brass Brackets, specially designed self-closing N. P. Fountain Cocks, N. P. Tumbler Holders and Glass Tumblers.

DIMENSIONS AND PRICES.

Length, single, one Faucet and two Tumblers, 24 inches; double, two Faucets and three Tumblers, 30 inches; Depth, front to back, 13 inches. Height, 15 inches.

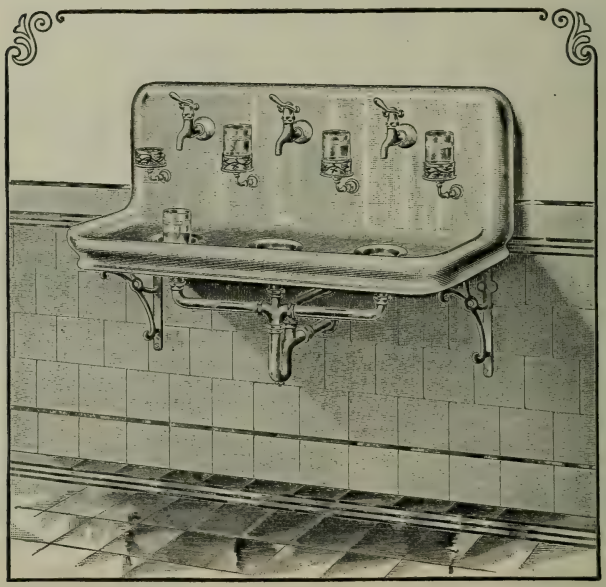
	Class A	Class B
Single, complete with one Faucet and two Tumblers,	$30.00	$26.00
Double, complete with two Faucets and three Tumblers,	40.00	36.00

The only sanitary and hygienic provision for drinking water in schools and other public buildings is a Special Drinking Fountain entirely apart from the wash sink. The Fountain should be placed where it is accessible to all and where it can be kept clean. The Unity, made of American Porcelain all in one piece, is thoroughly sanitary and meets the ideal for fixtures of this character. There are no crevices to hold dust, the arrangement is convenient and the appearance attractive, while all parts are exposed and accessible for cleaning.

UNITY DRINKING FOUNTAIN.

(MADDEN'S PATENT.)

FOR SCHOOLS, HOTELS, INSTITUTIONS, RAILWAY STATIONS, ETC.



R-505.

American Porcelain Drinking Fountain with Slab and Back in one piece (Slab countersunk 1½ inches), three N. P. recessed Strainers with continuous Waste and Trap, Heavy N. P. Brackets, three specially designed self-closing N. P. Fountain Cocks, four N. P. Tumbler Holders and Glass Tumblers.

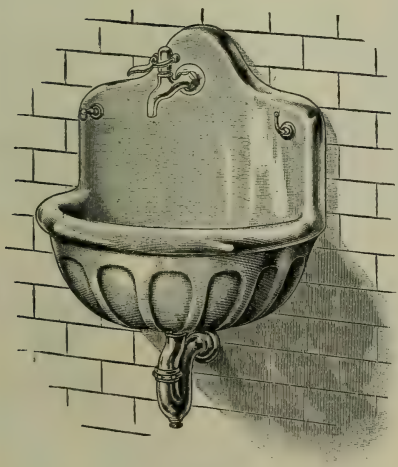
DIMENSIONS AND PRICES.

Length, 36 inches. Depth, front to back, 13 inches. Height, 15 inches.

	Class A	Class B
Price, complete with three Faucets and four Tumblers,	$54.00	$50.00

The only sanitary and hygienic provision for drinking water in schools and other public buildings is a Special Drinking Fountain entirely apart from the wash sink. The Fountain should be placed where it is accessible to all and where it can be kept clean. The Unity, made of American Porcelain all in one piece, is thoroughly sanitary and meets the ideal for fixtures of this character. There are no crevices to hold dust, the arrangement is convenient and the appearance attractive, while all parts are exposed and accessible for cleaning.

CLOW AMERICAN PORCELAIN DRINKING FOUNTAINS.

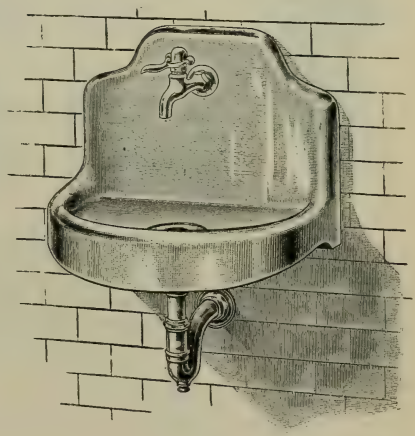


R-510.

American Porcelain Drinking Fountain with Nickel Plated Self-closing Faucet, Strainer, Trap, Chain Stay and Cup Hook.

	Class A.	Class B.
Price, - - - - -	$21.00	$16.00

DIMENSIONS—Length, 19½ inches; width, 18 inches; height of Back, 13 inches.



R-515.

American Porcelain Drinking Fountain with Nickel Plated Self-closing Faucet, Drip Cup, Brackets and Trap.

	Class A.	Class B.
Price, - - - - -	$24.00	$19.00

DIMENSIONS—Length, 14½ inches; width, 18 inches; height of Back, 10½ inches.

American Porcelain Drinking Fountains are especially adapted for use in Hotels, Railway Stations, Hospitals, etc. Like all fixtures made of American Porcelain, they are practically indestructible. Marble, on the contrary, is easily chipped or broken, while Enameled Iron, if once injured by a falling cup or blow soon becomes worthless. In point of beauty American Porcelain Fountains are without a rival. Made in one piece, with all corners rounded, they are easily kept clean — an important feature that must commend them.

In firing, some of these Fountains become marked with small spots or lines which in no way affect the durability of the Porcelain, or its general appearance. These are classed "B" to distinguish them from the fixtures that are free from all blemishes. When economy must be considered, Clow's "B" Fountains are recommended.

DRINKING FOUNTAINS.



R-520.

Clow Hygeia Drinking Fountain with American Porcelain Bowl, Nickel Silver Drinking Cup, Silver Bronzed Iron Standard, Nickel Plated Regulating Faucet and Waste Pipe to floor.

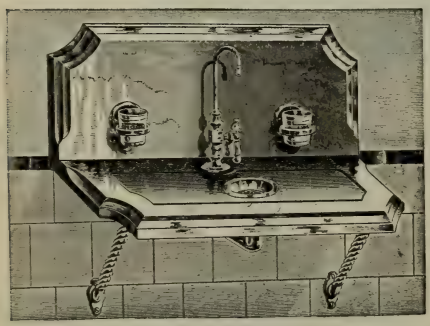
DIMENSIONS.

Height, 30 inches; Diameter of Bowl, 13 inches; Diameter of Waste Pipe, 1¼ inches; Size of Supply Pipe, ½ inch.

Price, complete, as described, - - - - - - - - - each, $24.00

Germs cannot be transmitted by the Hygeia. Nothing yet devised can be more sanitary in principle than this style of drinking fountain. Particularly for public places it is commended. Constantly running water covers the cup and keeps it cleansed. The regulating valve on the side controls the volume of the water column. There should be pressure enough to keep the water bounding an inch or two above the cup. Thus, the lips touch water only and do not come in contact with the cup itself.





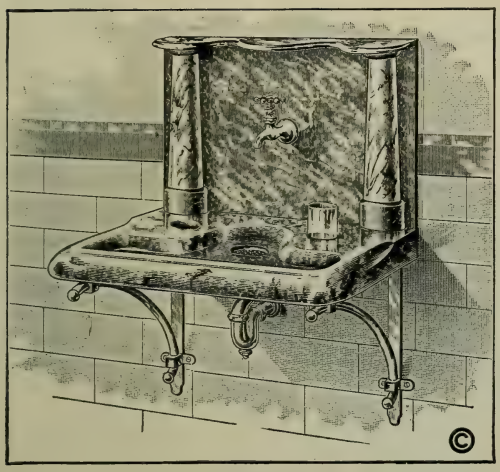
R-525.

R-525. Italian Marble Slab, 18 x 14 inches, 14-inch Back, Nickel Plated No. 2 Fuller Pantry Cock, Nickel Plated Brass Brackets, Drip Cup, Waste to Wall and Glass Holders, and Two Ornamental Glasses.

Price, as described, - - - - - - $17.00
If without Glass Holders and Glasses, deduct - - 2.75
If with Nickel Plated Trap, add - - - - 2.75

We can furnish these Drinking Fountains in any American or Foreign Marble, Onyx or Jasper, and in any special design or size.

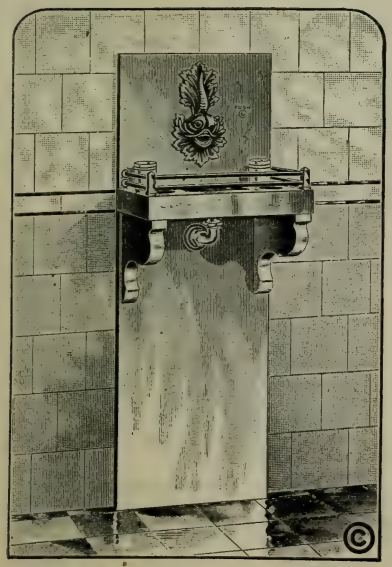
DRINKING FOUNTAINS.



R-528.

R-528. Tennessee Marble Slab, 20x14 inches, 3 inches thick, Countersunk 1½ inches, Back 14 inches, with Cap and Onyx Pilasters, Clow Nickel Plated Self-Closing Cock, Nickel Plated Drip Cup, Trap, Brackets and Glass Tumbler.

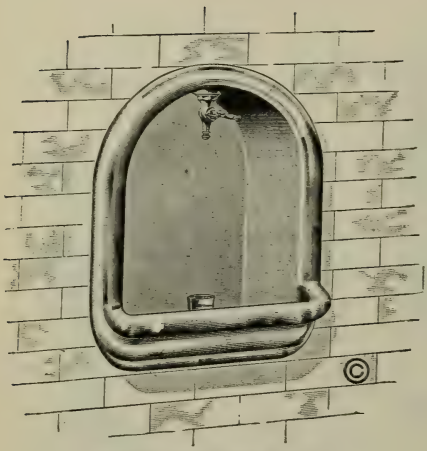
Price, as described, - - - $64.00



R-530.

R-530. Italian Marble Slab, 14x9 inches, 3 inches thick, Countersunk 1¼ inches, Back 16 inches, Italian Marble Supports 2 inches thick and Wall Slab ¾ inch thick, 39 inches high, 14 inches wide, Bronzed Head with Spout, Concealed Self-Closing Valve with Push Button, Nickel Plated Drip Cup and Waste to Wall, Nickel Plated Posts and ½-inch Rails 2¾ inches high, and Glass Tumblers.

Price, as described, - - - - - - $65.00



R-540. PORCELAIN RECESS

CLOW DRINKING FOUNTAINS.

American Porcelain Drinking Fountain with Clow Improved Nickel Plated Faucet, Strainer and Waste Plug.

	Class A.	Class B.
Price, as described - - -	$25.00	$20.00



R-545. COPPER ALCOVE.

No. 1. Copper Alcove, 6½ inches wide, 10 inches high, 3½ inches deep, inside measurements - $14.00
No. 2. Copper Alcove, 7½ inches wide, 11 inches high, 3¾ inches deep, inside measurements - 16.00
No. 4. Copper Alcove, 9 inches wide, 14½ inches high, 4⅜ inches deep, inside measurements - 20.00
No. 6. Copper Alcove, 12½ inches wide, 16½ inches high, 6 inches deep, inside measurements - 25.00

Sizes 1 and 2 carried in stock. Larger sizes made to order. Made of Heavy Sheet Copper and Cast Brass, highly finished and Nickel Plated, to set in recess.



R-550. ENAMELED IRON RECESS.

Enameled Iron Recessed Drinking Fountain, Nickel Plated Self-Closing Faucet and Outlet Coupling and Tail Piece.

Price, as described - - - - - $15.00

GEYSER DRINKING FOUNTAIN.



R-552.

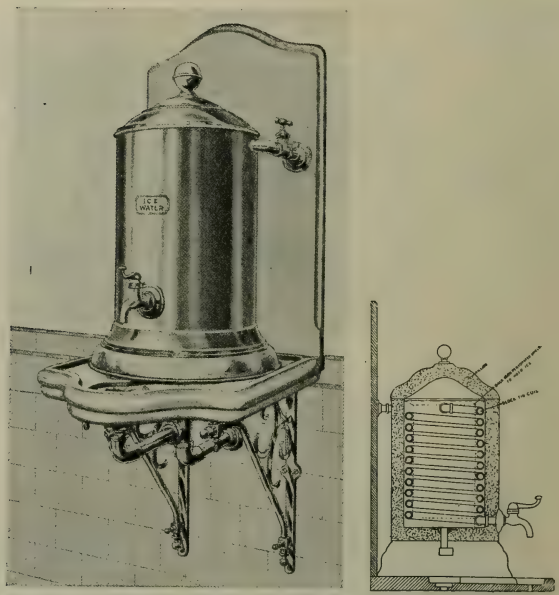
Geyser Drinking Fountain, comprising 2½-inch deeply countersunk Tennessee Marble Octagonal Slab, single Supply, four Simplicitas patent combination Fountain Cocks, metallic Drip Cups discharging through single Waste, and receding Legs. All trimmings are nickel plated.

Price, complete as described, ... $150.00

Italian Marble Slab furnished, if preferred, at same price.

The Geyser is a very desirable Fountain for Schools and other Public Buildings. It is constructed of the very best materials, is securely bolted and firmly braced. It is attractive, imposing and secure. The open construction permits free circulation of air around all parts, keeping it free from odors. All pipes and fixtures are accessible for cleaning. Where a modern, sanitary and substantial Fountain is desired, the Geyser will be found eminently satisfactory.

CHICAGO DRINKING FOUNTAIN.



R-555.

Chicago Pattern Water Cooler and Drinking Fountain, including Cooler as shown, with Tennessee Marble Slab, 18 x 24 inches, and Back 31 inches high, Drip Cup, Waste connection and N. P. Cast Brass Brackets.

DIMENSIONS.

Height of Cooler Body, 19¾ inches; height of Cover, 6½ inches; diameter of Cooler, 12 inches; diameter of Base, 16 inches; depth of Galvanized Tank for ice, 13 inches; diameter of Ice Tank, 7 inches.

R-555 Complete as described, ... $75.00

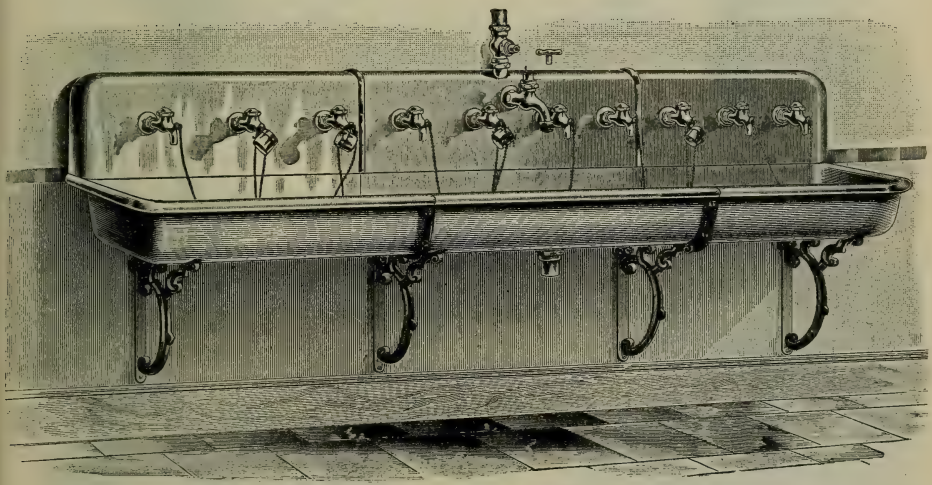
Slab and Back furnished in Italian Marble, if preferred, at same price.

This Fountain can be furnished in any size, with Marble of any kind, and metallic parts and connections of suitable finish to correspond with surroundings. Prices upon application.

The Chicago Fountain was especially designed by us for use in Hotels, Railway Stations, Public Office Buildings or any place where a constant flow of ice water is desired. Its arrangement obviates the drinking of melted ice, which is dangerous to health, as ice is often impure. The water is drawn direct from the water main and is cooled while passing through the coil shown in sectional. This coil is made of Block Tin Pipe, in which water can stand for any length of time without becoming stagnant or undergoing any chemical or physical change. The ice is contained in a galvanized Tank which rests inside of the coil. This Tank or Shield is perforated for drainage and can be removed. The filling, which is of mixed charcoal and quartz, never needs to be removed and offers the best of protection from outside temperatures.

ENAMELED ROLL-RIM DRINKING FOUNTAIN.

ON BRACKETS.



R-558.

Enameled Iron Roll-rim Sectional Drinking Fountain (10 feet long) with Back, 10 Brass Spouts, Loose Key Stop and Hose Bibb, all connected with Galvanized Iron Pipe, Brass Raised Strainer for 2-inch Iron Pipe, and Iron Brackets. Exterior Painted.

DIMENSIONS AND PRICES.

Width, front to back, 18 inches; width inside, 14 inches; depth, 8¼ inches at outlet; height of back, 12 inches; depth of back, 2¼ inches.

Lengths of Fountains,	6 ft.	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.	18 ft.	20 ft.	22 ft.	24 ft.
Number of Spouts,	6	8	10	12	14	16	18	20	22	24
Price, as shown and described,	$39.00	$51.00	$63.00	$75.00	$87.00	$99.00	$111.00	$123.00	$135.00	$147.00

If with Nickel Plated Brass Full S Trap (vented) to floor, add	$7.50
If with Rough Brass Full S Trap (vented) to floor, add	5.00

These Drinking Fountains are especially designed to suit the requirements of Schools, Hospitals and Public Institutions where it is desired to accommodate a number of persons at one time.

THE PASTEUR WATER FILTERS.



R-575. NYSA, COMBINED FILTER AND COOLER.

THE PASTEUR is accepted by all authorities as the only germ-proof Filter. We offer both Pressure and Non-pressure Filters for city and country use and carry for sale a full line of Filters and repairs.

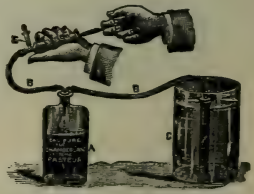


R-581. BAR FILTER.



R-577. NO. 1 AND TWO GALLON JAR FOR SMALL FAMILY USE.

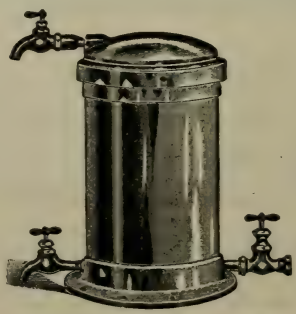
Write for Catalogue and prices. We will be pleased to recommend a Filter suitable for your requirements, on receipt of your specifications.



R-583. TOURIST FILTER.



R-579. ACORN RESERVOIR.

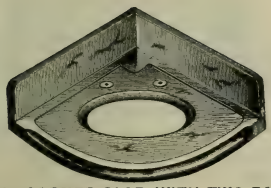


R-585. NON-RESERVOIR FILTER.

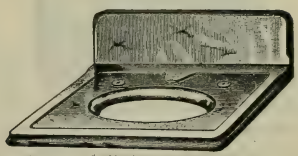


R-587. GLOBE RESERVOIR.

MARBLE.



R-600. CORNER SLAB, WITH TWO BACKS.



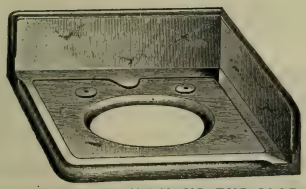
R-602. SINGLE BACK SLAB.

CORNER SLABS.—R-600.

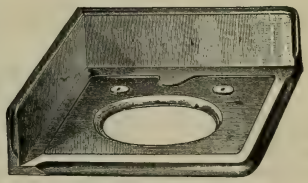
SIZE OF SLAB . . . . . INCHES	18 x 18	*19 x 19	*20 x 20	21 x 21	22 x 22	24 x 24
FEET IN SLAB, 8-INCH BACKS	4 ft. 11 in.	5 ft. 4 in.	5 ft. 9 in.	6 ft. 2 in.	6 ft. 7 in.	7 ft. 6 in.
FEET IN SLAB, 10-INCH BACKS	5 ft. 5 in.	5 ft. 10 in.	6 ft. 4 in.	6 ft. 9 in.	7 ft. 3 in.	8 ft. 2 in.
FEET IN SLAB, 12-INCH BACKS	6 ft.	6 ft. 5 in.	6 ft. 11 in.	7 ft. 4 in.	7 ft. 11 in.	8 ft. 11 in.

SINGLE BACK SLABS.—R-602.

SIZE OF SLAB . . . . . INCHES	*19 x 24	*20 x 24	20 x 26	20 x 28	*20 x 30	22 x 28	22 x 30
FEET IN SLAB, 8-INCH BACK	5 ft. 3 in.	5 ft. 6 in.	5 ft. 10 in.	6 ft. 4 in.	6 ft. 8 in.	6 ft. 9 in.	7 ft. 1 in.
FEET IN SLAB, 10-INCH BACK	5 ft. 7 in.	5 ft. 10 in.	6 ft. 3 in.	6 ft. 9 in.	7 ft. 2 in.	7 ft. 2 in.	7 ft. 6 in.
FEET IN SLAB, 12-INCH BACK	6 ft.	6 ft. 2 in.	6 ft. 8 in.	7 ft. 2 in.	7 ft. 7 in.	7 ft. 7 in.	8 ft.



R-605. RIGHT HAND END SLAB.

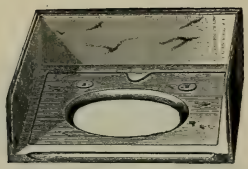


R-607 LEFT HAND END SLAB.

RIGHT OR LEFT HAND END SLABS.—R-605 and R-607.

SIZE OF SLAB . . . . . INCHES	*19 x 24	*20 x 24	20 x 26	20 x 28	*20 x 30	22 x 28	22 x 30
FEET IN SLAB, 8-INCH BACKS . . .	6 ft. 4 in.	6 ft. 7 in.	7 ft.	7 ft. 5 in.	7 ft. 10 in.	7 ft. 11 in.	8 ft. 3 in.
FEET IN SLAB, 10-INCH BACKS . . .	6 ft. 11 in.	7 ft. 2 in.	7 ft. 8 in.	8 ft. 1 in.	8 ft. 6 in.	8 ft. 8 in.	9 ft.
FEET IN SLAB, 12-INCH BACKS . . .	7 ft. 7 in.	7 ft. 10 in.	8 ft. 4 in.	8 ft. 9 in.	9 ft. 3 in.	9 ft. 4 in.	9 ft. 10 in.

*These sizes carried in stock in Italian Marble, cut with two Cock Holes, 14-inch Round Bowl, and for Basin Clamps.
Stock sizes marked * we also carry in Tennessee Marble, cut as above, with 10-inch Backs only.
All Slabs sent with 10-inch Backs unless otherwise ordered.
Extra charge will be made for Countersunk Slabs without Backs, O. G. or Bevel Edge Backs, Special Mouldings, stock size Slabs cut for Patent Waste, or with rounded corners over 1-inch radius.
When Slabs are packed less than three in a box, a charge of 5 cents per square foot will be made for boxing, and where three or more Slabs in one box a charge of 3 cents per square foot will be made.
Breakage in transit positively not allowed when shipped uninsured.
We will insure against breakage for a premium of 5 per cent of face of invoice.
When insurance is desired it must be so stated in order.
In calculating measurements add one inch to each finished edge.



R-610. RECESS SLAB WITH BACK AND TWO ENDS.

This Slab finishes flush with the wall. Recess Slabs are so varied in size that a table of measurements would be of no benefit.



R-612. RADIATOR OR COUNTER TOP.

In measuring allow about ¾-inch projection all around. We recommend the use of Pink Knoxville or No. 2 Tennessee Marble for Radiator or Counter Tops.

STOCK SIZES.

MARBLE SLABS CUT FOR OVAL BOWL.

CORNER SLABS.—R-615. (NOT ILLUSTRATED.)

FOR 14 X 17 BOWL . . . . . INCHES	20 x 20 x 10	22 x 22 x 10
NUMBER OF FEET IN SLAB	6 ft. 4 in.	7 ft. 3 in.

SINGLE BACK SLABS.—R-617. (NOT ILLUSTRATED.)

FOR 14 X 17 BOWL . . . . . INCHES	20 x 24 x 10	20 x 26 x 10	20 x 28 x 10	20 x 30 x 10	20 x 30 x 12	--------
FOR 15 X 19 BOWL . . . . . INCHES	--------	--------	--------	--------	--------	22 x 32 x 12
NUMBER OF FEET IN SLAB	5 ft. 10 in.	6 ft. 3 in.	6 ft. 9 in.	7 ft. 2 in.	7 ft. 7 in.	8 ft. 6 in.

RIGHT OR LEFT HAND END SLABS.—R-619 and R-621. (NOT ILLUSTRATED.)

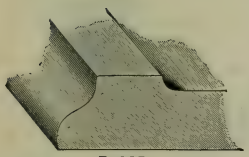
FOR 14 X 17 BOWL . . . . . INCHES	20 x 24 x 10	20 x 26 x 10	20 x 28 x 10	20 x 30 x 10	20 x 30 x 12	--------
FOR 15 X 19 BOWL . . . . . INCHES	--------	--------	--------	--------	--------	22 x 32 x 12
NUMBER OF FEET IN SLAB	7 ft. 2 in.	7 ft. 8 in.	8 ft. 1 in.	8 ft. 6 in.	9 ft. 3 in.	10 ft. 6 in.

TEMPLET OF OVAL BOWL SLABS—STOCK SIZES.

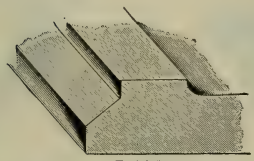
STYLE	Corner Slabs					Single Back—Back and End or Recess Slabs														
SIZE OF SLAB . . . INCHES	20 x 20		22 x 22			20 x 24			20 x 26			20 x 28			20 x 30			22 x 32		
SIZE OF BOWL . . INCHES	14	14x17	14	14x17	15x19	14	14x17	15x19	14	14x17	15x19	14	14x17	15x19	14	14x17	15x19	14	14x17	15x19
CENTER TO CENTER OF COCK-HOLES . INCHES	7	7	8	8	8½	12	13	13	12	13	13	12	13	13	12	13	13	12	13	13
BACK OF SLAB TO CENTER OF COCK-HOLE . INCHES	2½	2¼	2¾	2¾	2½	4½	4½	4	4½	4½	4	4½	4½	4	4½	4½	4	6¼	5¾	5
BACK OF SLAB TO CENTER OF BOWL . . . INCHES	--	--	--	--	--	10¾	10¾	10¾	10¾	10¾	10¾	10¾	10¾	10¾	10¾	10¾	10¾	12½	12½	12½
CORNER OF SLAB TO CENTER OF BOWL . . . INCHES	14¼	14¼	15¼	15¼	15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WALL LINE OF SLAB TO CENTER OF COCK-HOLE, INCHES	7½	7½	8½	8½	8¾	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Bowl always in center of Slab lengthwise. Any size Slabs made to order. Slabs longer than 6 feet will have to be made of two pieces. Soap Cups cut in marble, as shown in R-663, $2.00 net. Nickel Plated Union Strips for Sectional Marble Slabs, each, $1.75 net.

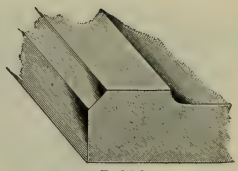
MARBLE.



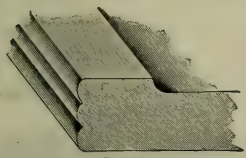
R-625.
Sectional Cut showing O. G. Moulding.



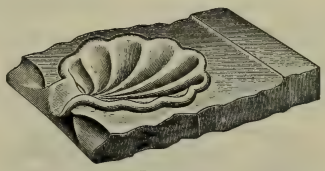
R-627.
Sectional Cut showing Fillet and Chamfer Moulding.



R-629.
Sectional Cut showing Plain Chamfer Moulding.



R-631.
Sectional Cut showing Triple Bead Moulding.



R-633.
"Fancy" Shell Soap Cup.

We are prepared to furnish Lavatories in the following grades of Fancy Marbles : African, St. Baume, French Jasper, Rouge Royal, American, Tennessee, Florence and Italian ; also in Mexican, Arizona, and Algerian Onyx.

APPROXIMATE PRICES OF MARBLE, SLATE AND SOAPSTONE.—Per Square Foot.

ITALIAN MARBLE.

THICKNESS — INCHES	⅞	1¼	1½	2
POLISHED ONE SIDE — PER SQUARE FOOT	.66	.78	1.02	1.30
POLISHED BOTH SIDES — PER SQUARE FOOT	.72	.84	1.08	1.35
COUNTERSUNK AND POLISHED — PER SQUARE FOOT	----	.90	1.15	1.45
WAINSCOT — PER SQUARE FOOT	.65	----	----	----

TENNESSEE MARBLE—PINK, FAWN, AND DARK.

THICKNESS — INCHES	⅞	1¼	1½	2
POLISHED ONE SIDE — PER SQUARE FOOT	.60	.72	.90	1.15
POLISHED BOTH SIDES — PER SQUARE FOOT	.66	.78	.96	1.21
COUNTERSUNK AND POLISHED — PER SQUARE FOOT	----	.72	1.02	1.38
WAINSCOT — PER SQUARE FOOT	.60	----	----	----

SLATE AND SOAPSTONE.

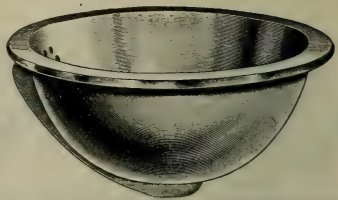
THICKNESS — INCHES	1	1¼	1½	2
RUBBED ONE OR BOTH SIDES — PER SQUARE FOOT	.45	.50	.70	.75
COUNTERSUNK — PER SQUARE FOOT	----	.65	.75	1.00
DRAIN BOARD GROOVING — PER SQUARE FOOT	.75	----	----	----
WAINSCOT — PER SQUARE FOOT	.45	----	----	----
WAINSCOT, MARBLEIZED — PER SQUARE FOOT	.60	----	----	----
WEIGHT, BOXED — POUNDS PER SQUARE FOOT	17	22	26	35

The above Prices are approximate only, and intended to aid the Architect or Contractor in computing the cost on Marble or Slate for ordinary work. Special Edges and Grooving or Extra Large Slabs will occasion an additional charge.

EARTHENWARE.



R-655. COMMON OVERFLOW, FOR METAL PLUG.



R-657. PATENT OVERFLOW, FOR METAL PLUG.

ROUND BASINS.—R-655 and R-657.

OUTSIDE DIAMETER . . . . . INCHES	12	13	14	15	16
R-655. COMMON OVERFLOW . . . . . EACH	1.00	1.00	1.00	1.50	2.00
R-657. PATENT OVERFLOW . . . . . EACH	1.25	1.25	1.25	2.00	2.50
NUMBER IN CRATE . . . . . EACH	----	----	48	----	----



R-659. PATENT OVERFLOW, FOR RUBBER PLUG.



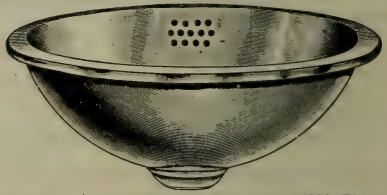
R-661. NO OVERFLOW, FOR METAL PLUG.

ROUND BASINS.—R-659 and R-661.

OUTSIDE DIAMETER . . . . . INCHES	12	13	14	15	16
R-659. PATENT OVERFLOW . . . . . EACH	1.50	1.50	1.50	2.50	3.00
R-661. WITHOUT OVERFLOW . . . . . EACH	1.00	1.00	1.00	1.50	2.00



R-663. COMMON OVERFLOW, FOR METAL PLUG.

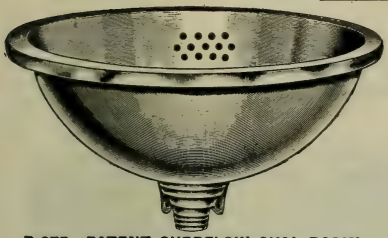


R-665. PATENT OVERFLOW, FOR METAL PLUG.

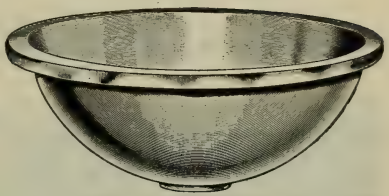
OVAL BASINS.—R-663 and R-665.

OUTSIDE DIAMETER . . . . . INCHES	14x17	15x19
R-663. COMMON OVERFLOW . . . . . EACH	2.50	3.50
R-665. PATENT OVERFLOW . . . . . EACH	3.00	4.00
NUMBER IN CRATE	48	48

Approximate weight of Crate, 650 pounds.



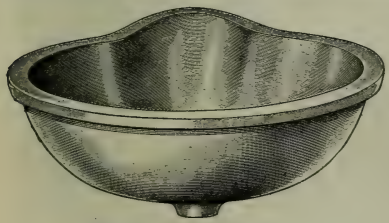
R-675. PATENT OVERFLOW OVAL BASIN, FOR RUBBER PLUG.



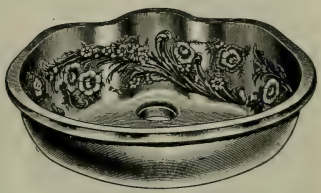
R-677. OVAL BASIN WITHOUT OVERFLOW FOR METAL PLUG.

OVAL BASINS.—R-675 and R-677.

OUTSIDE DIAMETER . . . . . INCHES	14x17	15x19
R-675. PATENT OVERFLOW . . . . . EACH	3.50	4.50
R-677. WITHOUT OVERFLOW . . . . . EACH	2.50	3.50
NUMBER IN CRATE	48	48



R-679. PLAIN RECESS BASIN.



R-681. PLAIN DECORATED RECESS BASIN.

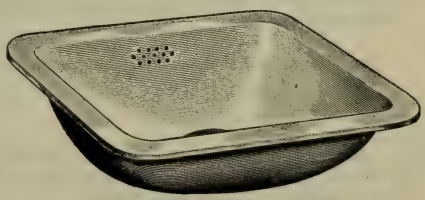
RECESS BASINS.—R-679 and R-681.

OUTSIDE DIAMETER . . . . . INCHES	14x17	15x19	14x14
R-679. PLAIN RECESS . . . . . EACH	5.00	6.00	-----
R-681. PLAIN DECORATED RECESS . . . . . EACH	----	----	12.00

R-681 Recess Basin is carried in stock, with a handsome decoration as shown, in Brown Tint underglazed.



R-683. EMBOSSED OVAL BASIN.



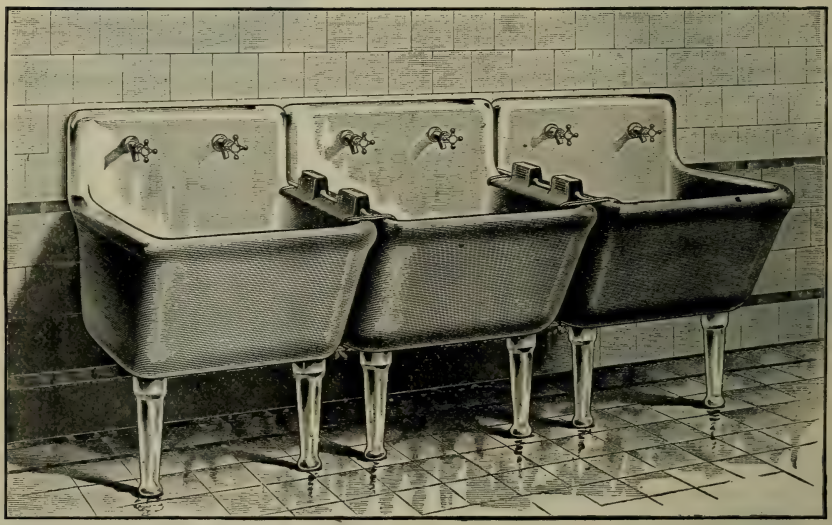
R-685. PLAIN SQUARE BASIN.

EMBOSSED OVAL AND SQUARE BASINS.—R-683 and R-685.

OUTSIDE DIAMETER . . . . . INCHES	14x17	15x19
R-683. EMBOSSED, WITHOUT OVERFLOW . . . . . EACH	3.50	4.50
R-683. EMBOSSED, PATENT OVERFLOW, METAL PLUG . . . . . EACH	4.00	5.00
R-685. PLAIN, SQUARE BASIN, NO OVERFLOW . . . . . EACH	5.00	6.00
R-685. PLAIN, SQUARE BASIN, WITH PATENT OVERFLOW . . . . . EACH	5.50	6.50

Grinding Basins extra, each, .25.

CLOW WHITE AMERICAN PORCELAIN LAUNDRY TUBS.



S-2.

Clow White American Porcelain Roll-rim Laundry Tubs with Porcelain Backs and Legs, Adjustable Iron Frame extending from each Leg to wall, Nickel Plated Compression Bibbs for ¼-inch Iron Pipe, and 1¼-inch Nickel Plated Brass Waste Plugs with Rubber Stoppers, Galvanized Iron Wringer Bases.

DIMENSIONS—Length of each Tub, 29 inches; width, 25 inches; depth, 16 inches; height of Back, 15 inches.

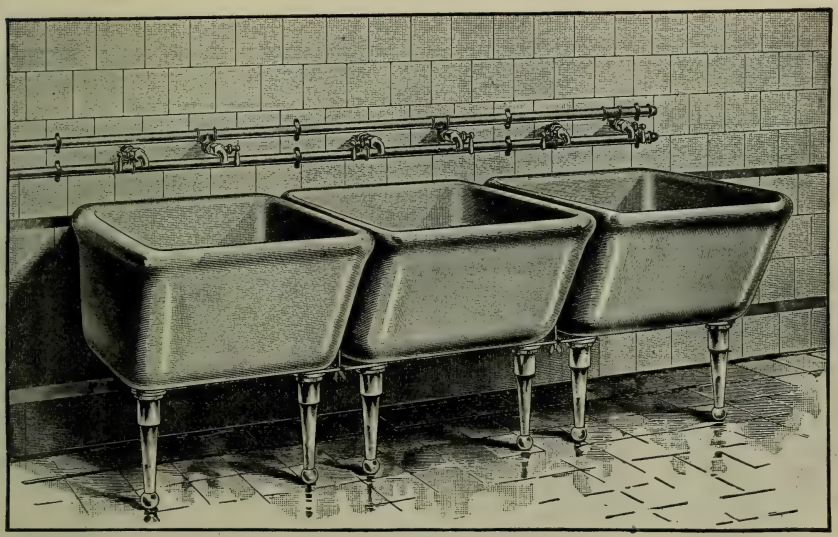
	Class A.	Class B.
Price as described, per set of Three Tubs,	$180.00	$138.00
Price as described, per set of Two Tubs,	118.00	90.50
If with Galvanized Iron Legs, as in S-4, deduct for each Tub	7.00	4.25
If with Finished Brass Connected Waste, Trap and connected Overflows, as in S-5, add, for set of three Tubs, $28.50; for two Tubs, $19.00.		

Clow American Porcelain is conceded to be the most durable, attractive and sanitary ware for plumbing fixtures. When used for Laundry Tubs, its superiority over other wares is obvious, the all-white Tubs and Porcelain Legs presenting a beautiful appearance and insuring the cleanliness so important in all Laundry appointments. The original cost is more, but the long life of the material makes it cheaper in the end. The plumbing work for a good Tub costs no more than for a cheap one.

Class B Tubs are equal to Class A in durability and general appearance, the only difference being the presence of slight marks or lines which must occur occasionally, in firing large pieces of Porcelain.

Any Wringer can be easily and firmly attached to our special Wringer-base, which drains into the Tubs on either side and thus prevents the water from dripping between the Tubs.

CLOW WHITE AMERICAN PORCELAIN LAUNDRY TUBS.



S-4.

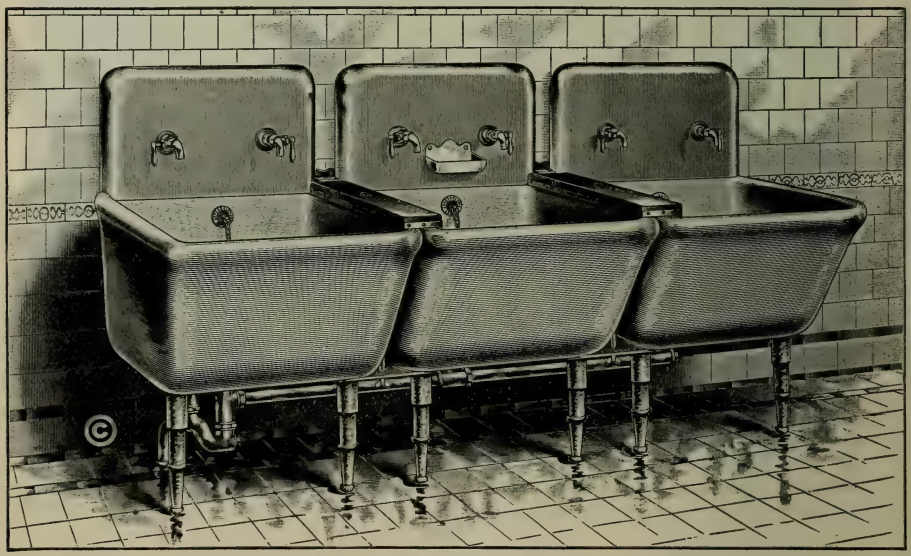
Clow White American Porcelain Roll Rim Laundry Tubs with Galvanized Iron Legs, Adjustable Iron Frame extending from each Leg to wall, Galvanized Iron Supply Pipes and $\frac{5}{8}$-inch Fuller Bibbs.

DIMENSIONS—Length of each Tub, 29 inches; width, 25 inches; depth, 16 inches.

	Class A.	Class B.
Price as described, per Set of Three Tubs,	$90.00	$67.70
Price as described, per Set of Two Tubs,	61.40	46.00
Wringer Bases, extra, each,	5.00	5.00
If with Porcelain Legs, as in S-1, add for each Tub,	7.00	4.30

For Special Wash Tray Fittings, see page 97.

CLOW BUFF-COLORED AMERICAN PORCELAIN LAUNDRY TUBS.



S-5.

Clow Buff-colored American Porcelain Laundry Tubs with Porcelain Backs and Ash Wringer Bases, Galvanized Iron Legs and Soap Cup, Adjustable Iron Frame extending from each Leg to wall, Finished Brass Fuller Bibbs for ¾-inch Iron Pipe, Finished Brass Overflows connected to 1¼-inch Continuous Waste, with 2-inch Brass Trap and Vent Connections.

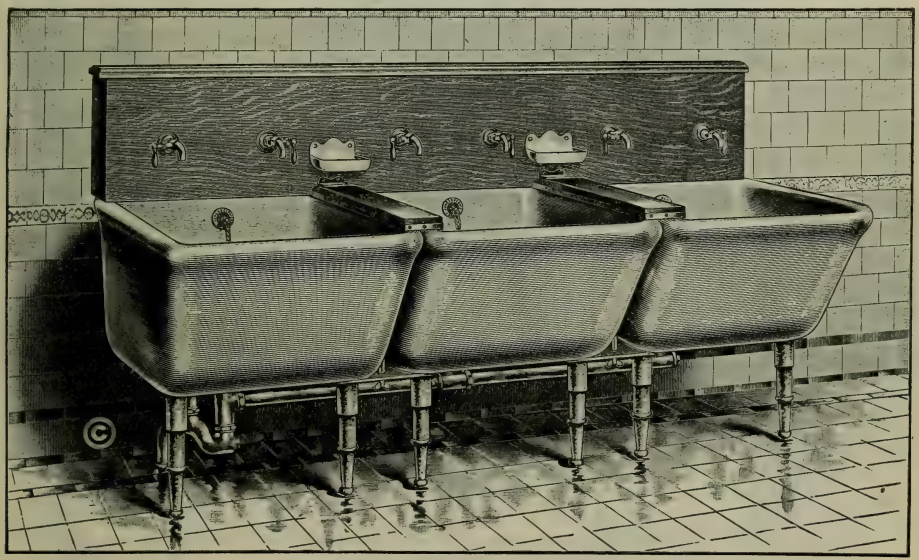
DIMENSIONS.—Length of each Tub, 29 inches; width, 25 inches; depth, 16 inches; height of Back, 15 inches.

Price as described, per set of Three Tubs,	$111.75
Price as described, per set of Two Tubs,	74.00

Our Buff-colored American Porcelain is a deep cream in tint, and glazed inside and outside. Equaling in strength the White Porcelain, and the same in design, it enables us to offer a handsome, thoroughly sanitary and durable Porcelain fixture at a price much lower than that of the white ware.

The Clow Special C Wringer Base, as shown in S-7, can be furnished in place of the one shown above without extra charge.

CLOW BUFF-COLORED AMERICAN PORCELAIN LAUNDRY TUBS.



S-6.

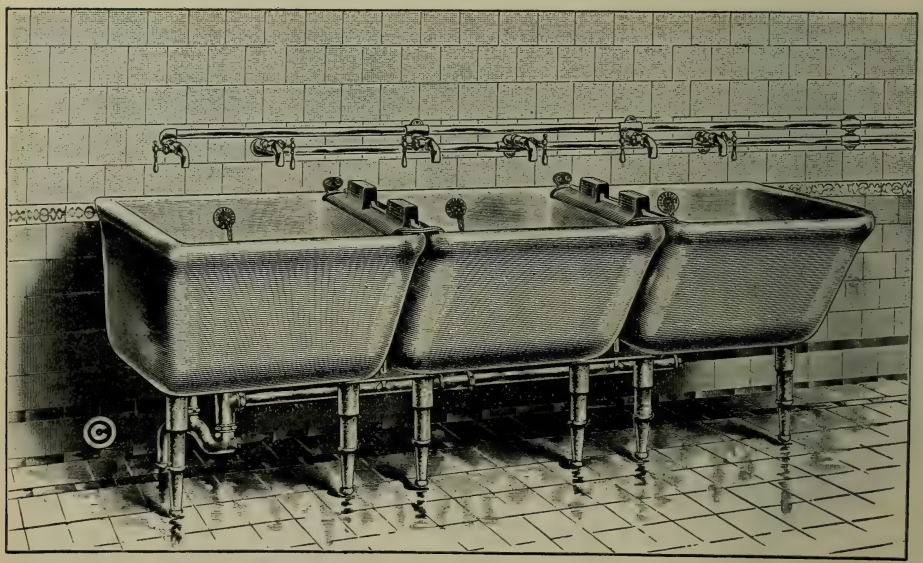
Clow Buff-colored American Porcelain Laundry Tubs with Finished Ash Back and Wringer Bases, Galvanized Iron Legs and Soap Cup, Adjustable Iron Frame extending from each Leg to wall, Finished Brass Fuller Bibbs for ¾-inch Iron Pipe, Finished Brass Overflows connected to 1¼-inch Continuous Waste, with 2-inch Brass Trap and Vent Connections.

DIMENSIONS.—Length of each Tub, 29 inches; width, 25 inches; depth, 16 inches; height of Back, 14 inches.

Price as described, per set of Three Tubs,	$102.75
Price as described, per set of Two Tubs,	67.25

The Clow Special C Wringer Base, as shown in S-7, can be furnished in place of the one shown above without extra charge.

CLOW BUFF-COLORED AMERICAN PORCELAIN LAUNDRY TUBS.



S-7.

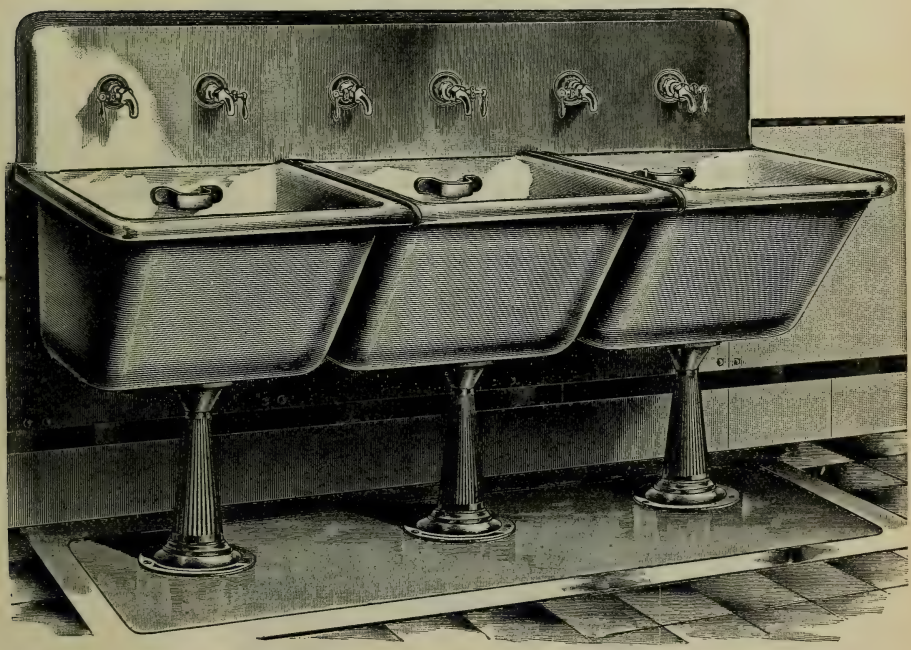
Clow Buff-colored American Porcelain Laundry Tubs with Clow Special Galvanized Iron Wringer Bases, Galvanized Iron Legs and Adjustable Frame extending from each Leg to wall, Galvanized Iron Supply Pipes and ⅜-inch Fuller Bibbs, Finished Brass Overflows connected to 1½-inch Continuous Waste, with 2-inch Brass Trap and Vent Connections.

DIMENSIONS.—Length of each Tub, 29 inches; width, 25 inches; depth, 16 inches.

Price as described, per set of Three Tubs, ... $95.00
Price as described, per set of Two Tubs, ... 62.50

For Special Wash Tray Fittings, see page 97.

CLOW ENAMELED IRON ROLL-RIM LAUNDRY TUBS.



S-20.

Enameled Iron Roll-rim Laundry Tubs with 15-inch Enameled Roll-rim Back, Soap Cups, Nickel Plated Brass Union Strips, ½-inch Fuller Wash Tray Bibbs, Nickel Plated Brass Plugs with Rubber Stoppers and Couplings.

DIMENSIONS.

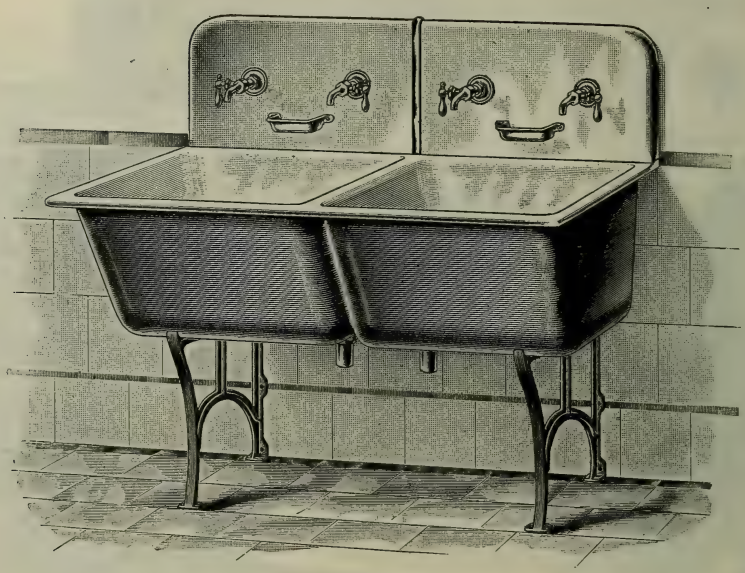
Inside, front to back, 22 inches; outside, front to back, 26¼ inches; width inside, 24 inches; height from floor to top of rim, 30 inches; set of two Tubs, length over all, 55 inches; set of three Tubs, length over all, 82 inches.

PRICES.

	With Backs.	Without Backs.
Price as described, per set of Two Tubs,	$42.60	$34.60
Price as described, per set of Three Tubs,	63.40	51.90
If with Brass Patent Overflow, add, each Tub,		$1.25
Hard Wood Wringer Bases, extra, each,		1.00

Laundry Tubs will be sent drilled for Faucets unless otherwise ordered.

CLOW'S ENAMELED IRON LAUNDRY TUBS.



S-22.

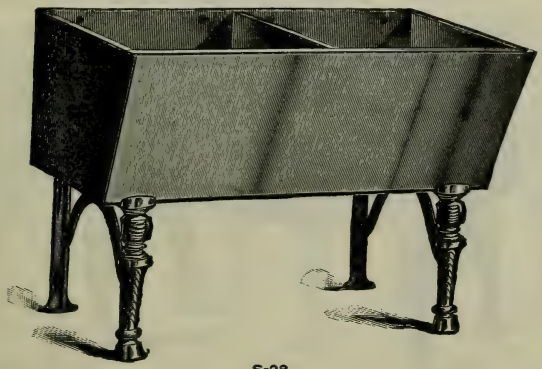
Enameled Iron Laundry Tubs with 12-inch Enameled Backs and Nickel Plated Brass Union Strips, Enameled Soap Cups, Painted Iron Legs, ⅝-inch Brass Fuller Wash Tray Bibbs, Plugs with Rubber Stoppers and Couplings.

	With Backs.	Without Backs.
Price, as described,	$36.10	$29.60

SIZE, OUTSIDE MEASUREMENT—Length, 4 feet 2 inches; width, 25 inches; depth, 15 inches.

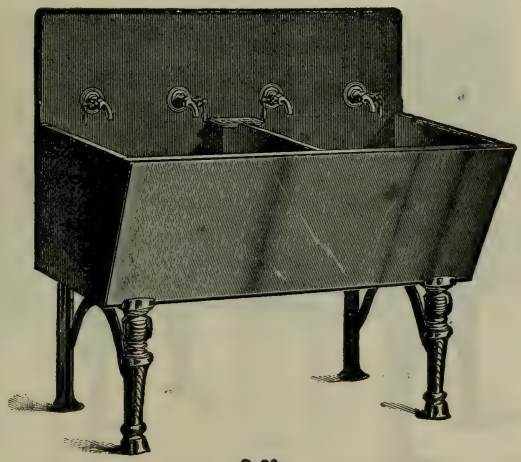
The above two-part Laundry Tub is cast in one piece, thus combining economy of space with beauty of outline. This Tub permits the use of an ordinary wringer, no special attachment being necessary.

CLOW TENNESSEE MARBLE LAUNDRY TUBS.



S-28.

Includes two Laundry Tubs, Iron Legs, and 1¼-inch Polished Brass Plugs.



S-30.

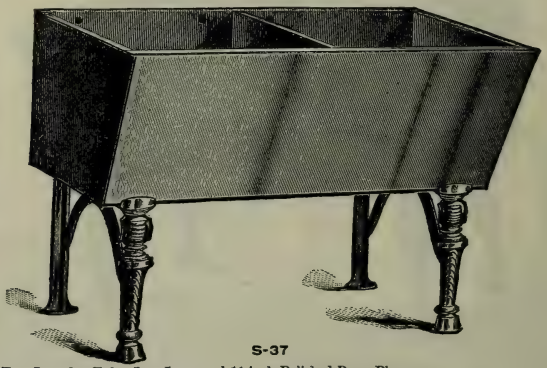
Includes two Laundry Tubs with 12-inch Back, Soap Cup, Iron Legs, 1¼-inch Polished Brass Plugs with Locknuts and Couplings, and ½-inch Fuller Brass Wash Tray Bibbs.

LAUNDRY TUBS.—S-28 and S-30.

Sets.	Length.	Width.	Depth.	S-28.		S-30.	
				Complete, with Painted Legs.	Complete, with Galvanized Legs.	Complete, with Painted Legs.	Complete, with Galvanized Legs.
2 Tubs.	48 inches.	24 inches.	16 inches.	16.00	17.40	26.10	27.50
2 Tubs.	54 inches.	24 inches.	16 inches.	20.50	21.90	30.60	32.00
3 Tubs.	72 inches.	24 inches.	16 inches.	32.15	34.25	46.40	48.50
3 Tubs.	78 inches.	24 inches.	16 inches.	37.15	39.25	51.40	53.50

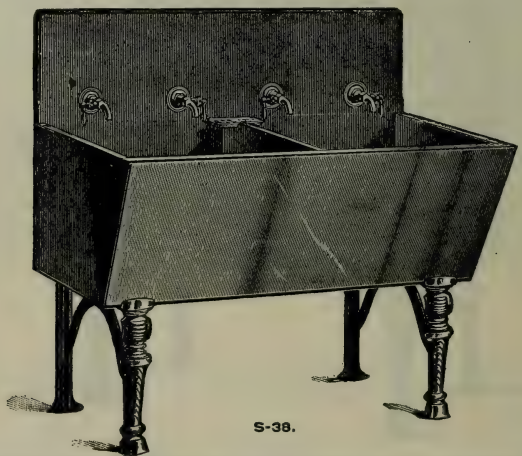
S-28 if with ½-inch Fuller Wash Tray Bibbs, add for each Bibb $1.15.

CLOW "VIRGINIA" STONE OR SLATE LAUNDRY TUBS.



S-37

Includes Two Laundry Tubs, Iron Legs, and 1¼-inch Polished Brass Plugs.



S-38.

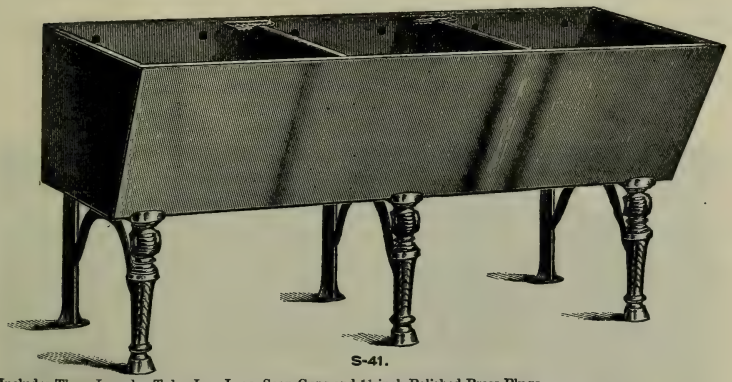
Includes Two Laundry Tubs with 12-inch Back, Soap Cup, Iron Legs, 1¼-inch Polished Brass Plugs with Locknuts and Couplings, and ⅝-inch Fuller Brass Wash Tray Bibbs.

LAUNDRY TUBS.—S-37 and S-38.

List No.	Length.	Width.	Depth.	S-37.		S-38.	
				Complete, with Painted Legs.	Complete, with Galvanized Legs.	Complete, with Painted Legs.	Complete, with Galvanized Legs.
5	48 inches.	24 inches.	16 inches.	16.00	17.40	26.10	27.50
6	54 inches.	24 inches.	16 inches.	20.50	21.90	30.60	32.00

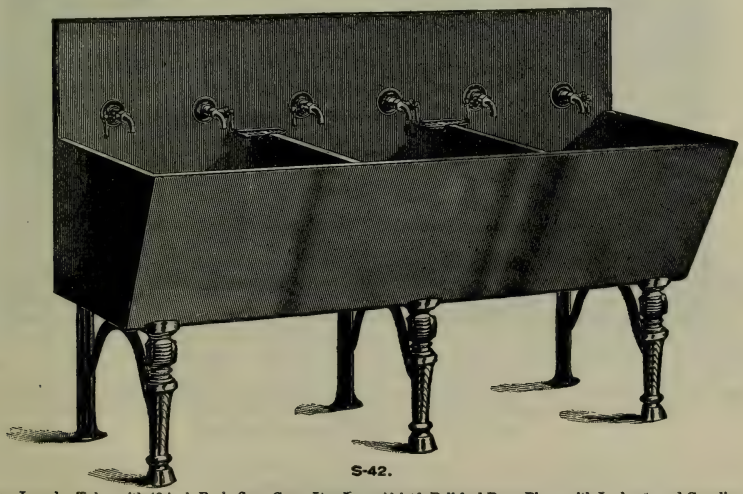
S-37 If with ⅝-inch Fuller Wash Tray Bibbs, add for each Bibb $1.15.

CLOW'S "VIRGINIA" STONE OR SLATE LAUNDRY TUBS.



S-41.

Includes Three Laundry Tubs, Iron Legs, Soap Cups and 1¼-inch Polished Brass Plugs.



S-42.

Includes Three Laundry Tubs, with 12-inch Back, Soap Cups, Iron Legs, 1¼-inch Polished Brass Plugs with Locknuts and Couplings, and ½-inch Fuller Brass Wash Tray Bibbs.

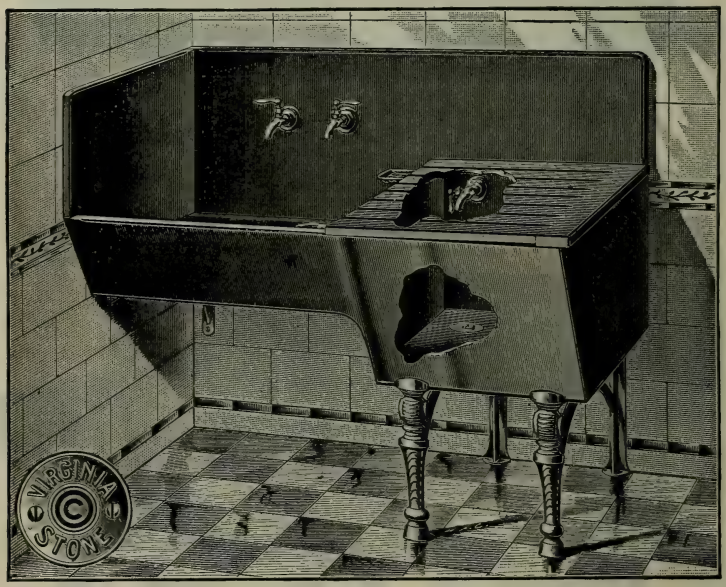
LAUNDRY TUBS.—S-41 and S-42.

List No.	Length.	Width.	Depth.	S-41.		S-42.	
				Complete, with Painted Legs.	Complete, with Galvanized Legs.	Complete, with Painted Legs.	Complete, with Galvanized Legs.
7	72 inches.	24 inches.	16 inches.	32.15	34.25	46.40	48.50
8	78 inches.	24 inches.	16 inches.	37.15	39.25	51.40	53.50
9	84 inches.	24 inches.	16 inches.	40.15	42.25	54.40	56.50

S-41 If with ½-inch Fuller Wash Tray Bibbs, add for each Bibb $1.15.

CLOW'S COMBINATION LAUNDRY TUBS AND SINKS.

"VIRGINIA" STONE OR SLATE.



S-50.

Kitchen Sink with Left Hand End and One-part Laundry Tub, 12-inch Back, Galvanized Soap Cup, Iron Legs and Bracket, Polished Brass Sink Strainer, 1¼-inch Polished Brass Tray Plug with Locknut and Coupling, ¾-inch Fuller Brass Sink and Tray Bibbs and Oak Drain Board.

DIMENSIONS AND PRICES.

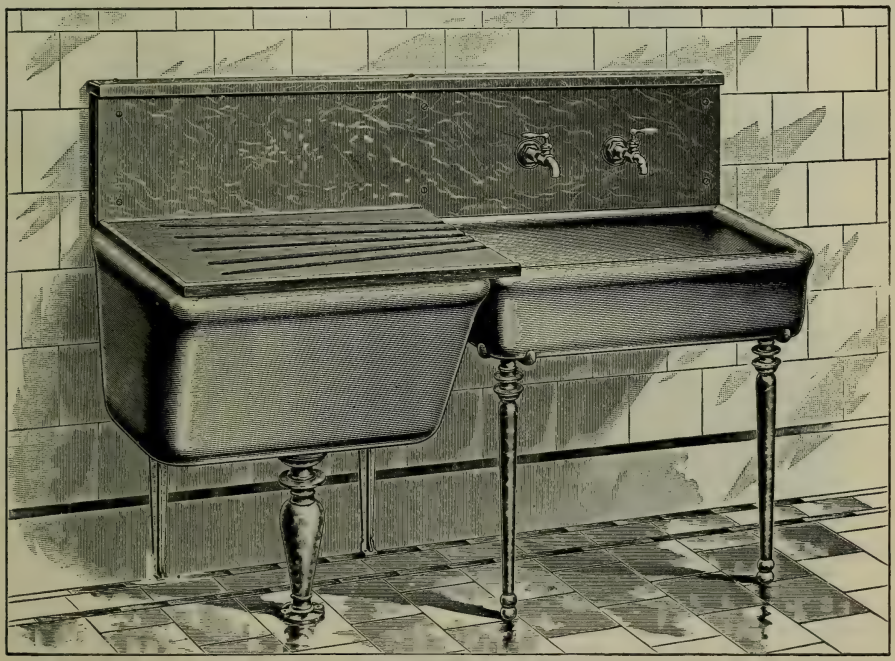
List No.	Size of Sink.	Size of Tub.	Total Length.	Complete, with Painted Legs.	Complete, with Galvanized Legs.
16	24 x 24 x 8 inches.	24 inches.	4 feet.	30.50	31.90
17	24 x 30 x 8 inches.	24 inches.	4 feet 6 inches.	35.00	36.40

If without Oak Drain Board, deduct $3.00. If without Left Hand End, deduct $2.00.

S-51. Sink and End on Right of Tub, otherwise complete as described above, same price.

CLOW PORCELAIN COMBINATION LAUNDRY TUBS AND SINKS.

BUFF COLOR.



S-56.

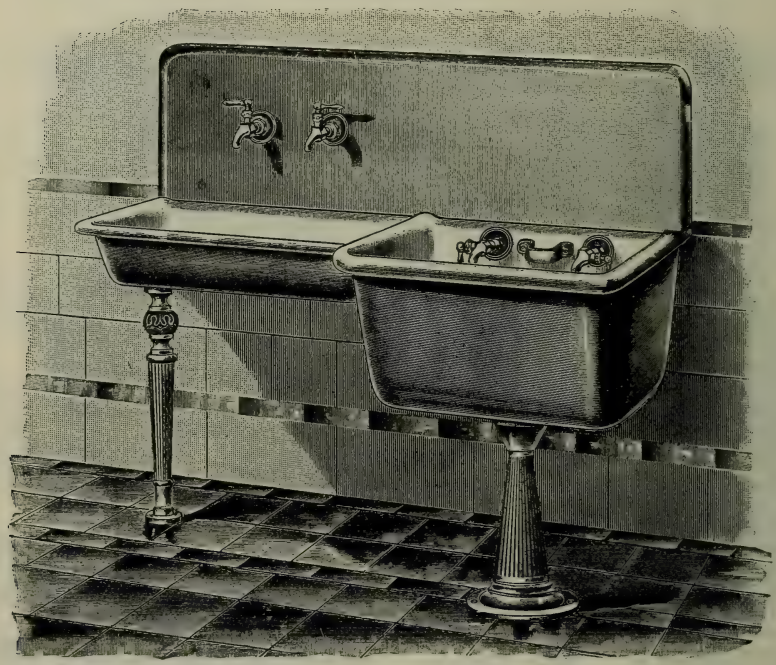
Porcelain Roll-rim Kitchen Sink and Laundry Tub with 12-inch Tennessee Marble Back, Shelf and Return Ends, Galvanized Iron Legs, 1¼-inch Polished Brass Sink and Tray Plugs with Locknuts and Couplings, ⅝-inch Fuller Brass Sink and Wash Tray Bibbs and Oak Drain Board.

DIMENSIONS AND PRICES.

List No.	Size of Sink.	Size of Tub.	Total Length.	Price, Complete.
1	22 x 30 x 8 inches.	24 x 30 inches.	5 feet.	46.00
2	22 x 36 x 8 inches.	24 x 30 inches.	5 feet 6 inches.	50.00
3	22 x 42 x 8 inches.	24 x 30 inches.	6 feet.	56.00

CLOW COMBINED LAUNDRY TUBS AND SINKS.

PORCELAIN LINED. ROLL-RIM.



S-60.

Enameled Iron Roll-rim Laundry Tub and Sink combined, 15-inch Enameled Back, Nickel Plated ¾-inch Sink and Wash Tray Bibbs, Nickel Plated Brass Plug and Rubber Stopper.

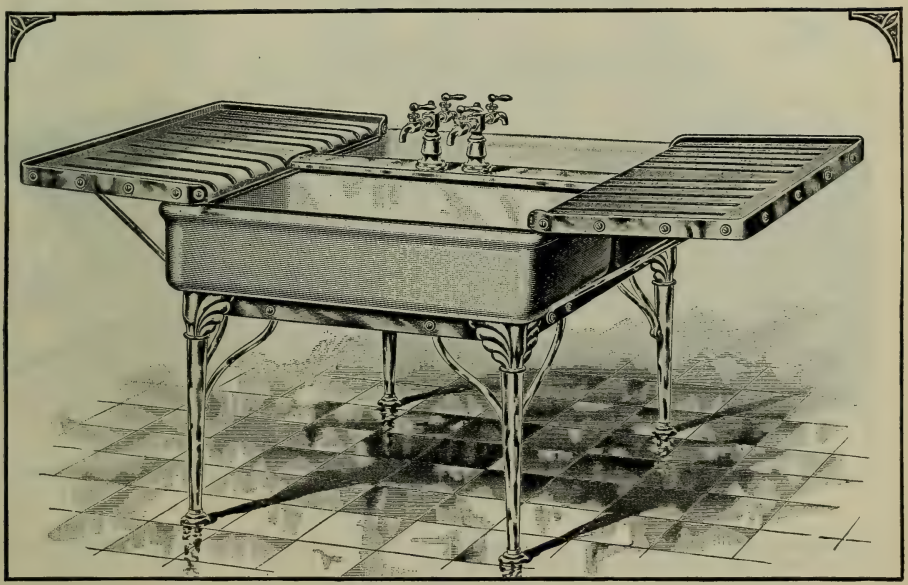
DIMENSIONS AND PRICES.

Size,	20 x 30	20 x 36
Price as described, one Sink and One Tub,	$46.75	$48.25
Price as described, one Sink and Two Tubs,	75.50	77.00
If with Patent Overflow in Tub, add to list,		2.00
If with Ash Drain Board to cover Laundry Tub, add to list,		2.00

NOTE—Sink can be furnished on right of Tub if desired. Always sent as shown and described unless otherwise specified.

S-61.	Same as above, with left hand end piece, add	$2.50
S-62.	Same as above, with right hand end piece, add	2.50

CLOW DUPLEX SINK.



S-63.

American Porcelain Duplex Roll-rim Sink, with Galvanized Iron Frame and Standards, Galvanized Iron Double Cock Standard, finished Brass Faucets, Double Oak Drain Boards reinforced with finished Brass Band, and Oak Connecting Strip 6 inches wide.

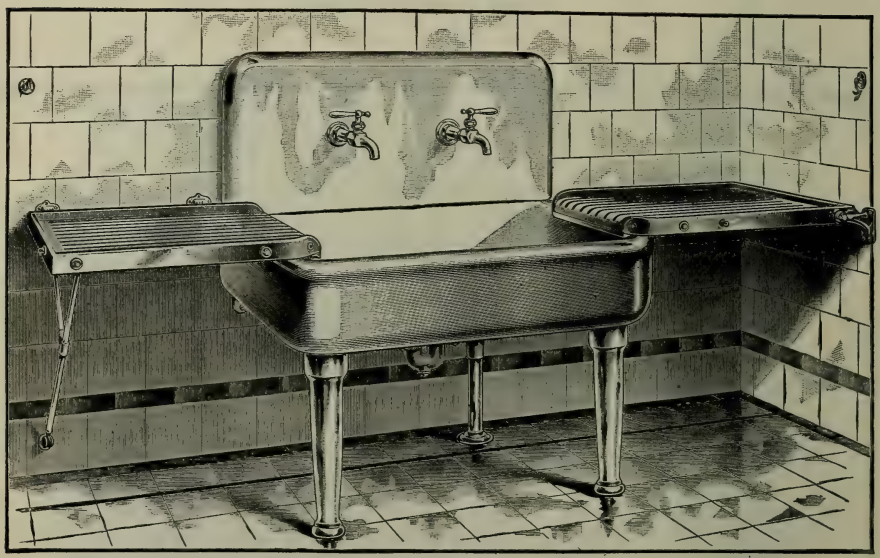
DIMENSIONS AND PRICES

Size of Sink,	Inches,	23 x 36 x 7	24 x 42 x 7	24 x 48 x 7
Size of Drainboard,	Inches,	26 x 48	26 x 50	26 x 50
Width Over All,	Inches,	48	50	50
Length Over All,	Inches,	60	66	72
Class A,	Each,	$134.00	$155.00	$168.00
Class B,	Each,	124.00	137.00	150.00

If with one Drain Board, deduct $12.00.

If with N. P. Brass Frame and Standards, and N. P. Brass Double Cock Standard, N. P. Faucets, Double Oak Drain Boards reinforced with N. P. Brass Bands, add $40.00.

CLOW AMERICAN PORCELAIN KITCHEN SINKS.



S-65.

American Porcelain Roll-rim Kitchen Sink, with 18-inch Porcelain Back and Legs, Nickel Plated Fuller Bibbs, and Trap with Vent, 30-inch Oak Drain Boards, Nickel Plated Hinges and Adjustable Support.

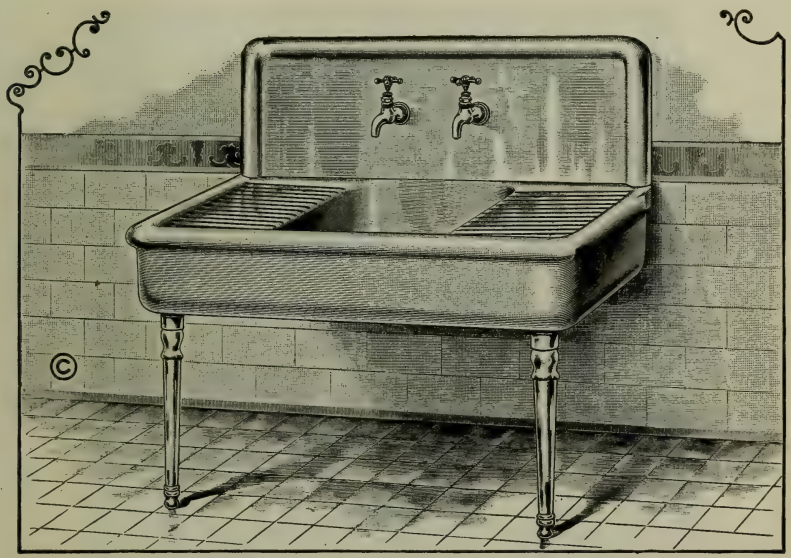
Size of Sink.	Width of Drain Boards.	Class A.	Class B.
	PRICES.		
20 x 30 x 7 inches,	19½ inches,	$70.50	$61.50
23 x 36 x 7 inches,	21½ inches,	76.50	64.30
24 x 42 x 7 inches,	22½ inches,	81.50	69.20
24 x 48 x 7 inches,	22½ inches,	88.50	74.10
If with Galvanized Legs, deduct		7.00	3.40
If without Drain Board with End Hinges, deduct			$12.00
If without Drain Board with Adjustable Support, deduct			16.50
If with Soap Cup, add			1.00

Dimensions of Sinks are outside, except depth, which is inside.

Wood mats should be used with these sinks to prevent damage to bottom of the sink by kettles, etc. For prices see page 711.

Nothing could be more suitable and attractive for Kitchen Sinks than American Porcelain, the increased demand for which has led us to perfect the ware until it is now vastly superior to Marble, Enameled Iron and all other materials used for sanitary appliances. Its hard, smooth glaze presents an unbroken, highly finished surface which renders it, unlike marble, entirely impervious to grease and other stains, while it is easily kept clean and is practically indestructible. Moulded in one piece with free, rounded corners, the lodgment of foreign matter is impossible, as there are no angles or crevices. The Porcelain Legs not only add to the beauty and strength of the fixture, but obviate the polishing necessary for metal.

CLOW AMERICAN PORCELAIN KITCHEN SINKS.



S-70.

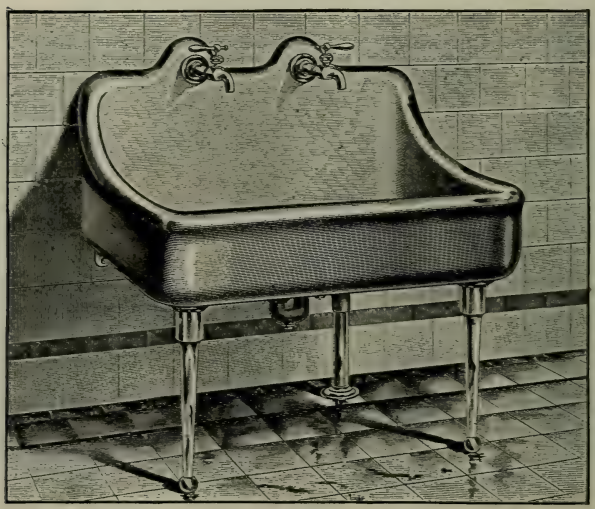
*American Porcelain Roll-rim Kitchen Sink with Drain Board at each end, Porcelain Back, 18 inches high, Silver Bronzed Iron Legs, Compression Bibbs with China Centers, Nickel Plated Brass Strainer and Coupling.

DIMENSIONS.—Total length, 50 inches; width, 20 inches; depth, inside, 7 inches; length of each Drainboard, 13 inches.

		Class A	Class B	Class C
S-70.	Complete, as described and shown	$60.00	$47.00	$38.00
S-71.	Same as above, with Drainboard at left end only; total length, 42 inches	50.00	41.00	33.00
If with Nickel Plated Brass Legs, add				$8.00

This Sink has the entire Body and Drain Boards all in one piece, while all corners, angles and even the grooves have rounding edges and curves, leaving no crevices for the accumulation of dust or grease. The Porcelain Drain Board is more cleanly than wood, as it is impervious to moisture and therefore cannot become water soaked or sour. The Roll-rim, extending entirely around the Drain Boards and rising slightly above them, prevents water from splashing upon the floor.

CLOW AMERICAN PORCELAIN KITCHEN SINKS.



S-75.

American Porcelain Roll-rim Kitchen Sink with High Back, Nickel Plated Fuller Bibbs, 1¼-inch Trap with Vent, and Bronzed Iron Legs.

Size of Sink.	PRICES. Class A.	Class B.
20 x 30 x 7 inches,	$39.00	$30.00
23 x 36 x 7 inches,	44.00	33.00
24 x 42 x 7 inches,	54.00	40.50
If with Porcelain Legs, add	7.00	3.40
If with Nickel Plated Brass Legs, add	5.00	5.00

Oak Drain Board with End Hinges, add $12.00; Oak Drain Board with Hinges and Adjustable Support, add $16.50. Dimensions of Sinks are outside, except depth, which is inside.

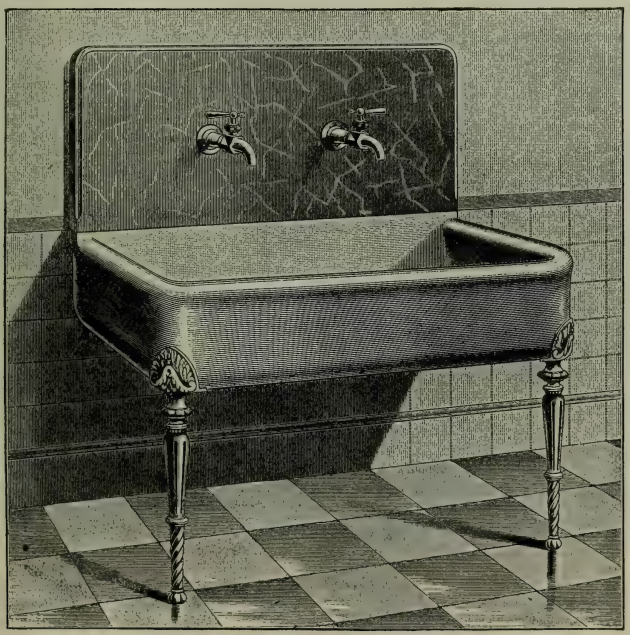
Wood mats should be used with these Sinks to prevent damage to bottom of the Sink by kettles, etc. For prices see page 711.

What has been said of American Porcelain on previous pages is alike applicable to this fixture. The Sink and Back are made in one solid piece, and are, therefore, rendered free from broken or angular surfaces, which are always hard to keep clean.

In firing, some of these sinks become marked with small spots or lines which in no way affect the practical qualities or general appearance of the fixtures. These are known as Class B, and are recommended when economy is a consideration.

CLOW PORCELAIN KITCHEN SINKS.

BUFF COLOR.

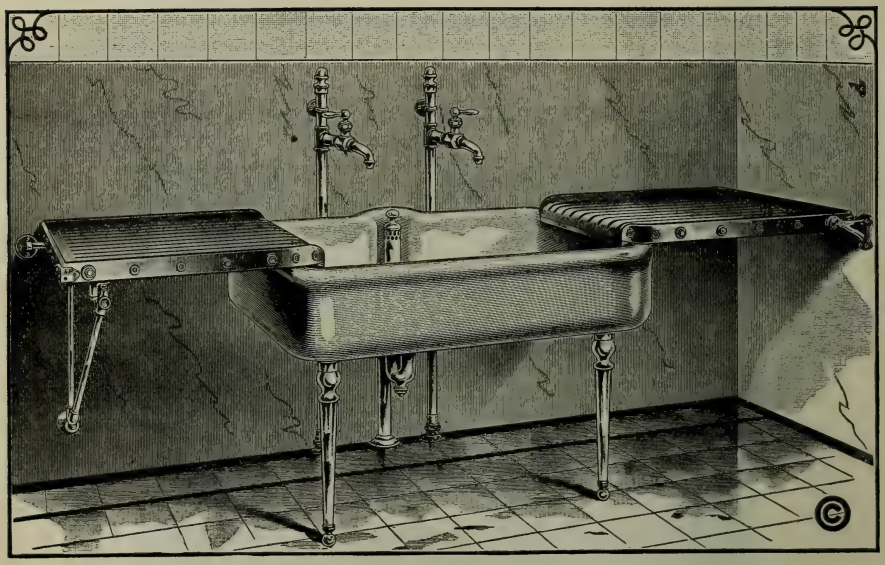


S-80.

Roll-Rim, Buff Color Porcelain Sink with Pink Tennessee Marble Back, 16 inches high, Galvanized Iron Legs, 1¼-inch Brass Plug, ¼-inch Fuller Flange and Thimble Bibbs.

DIMENSIONS AND PRICES.

Size, Outside Measure,	Inches	36 x 22 x 8	42 x 22 x 8
Price, complete as above,		$25.00	$30.00
If with Drain Board with End Hinges, add			12.00
If with Drain Board with Adjustable Support, add			16.50



S-84.

American Porcelain Rolled-rim Sink, Nickel Plated Standing Waste, 2-inch Trap with Vent, ½-inch Supply Pipes, Air Chambers and Unions, ½-inch Long Pattern Fuller Bibbs, Galvanized Iron Legs with Extension to wall, 30-inch Oak Drain Boards, Nickel Plated Hinges and Adjustable Supports.

PRICES.

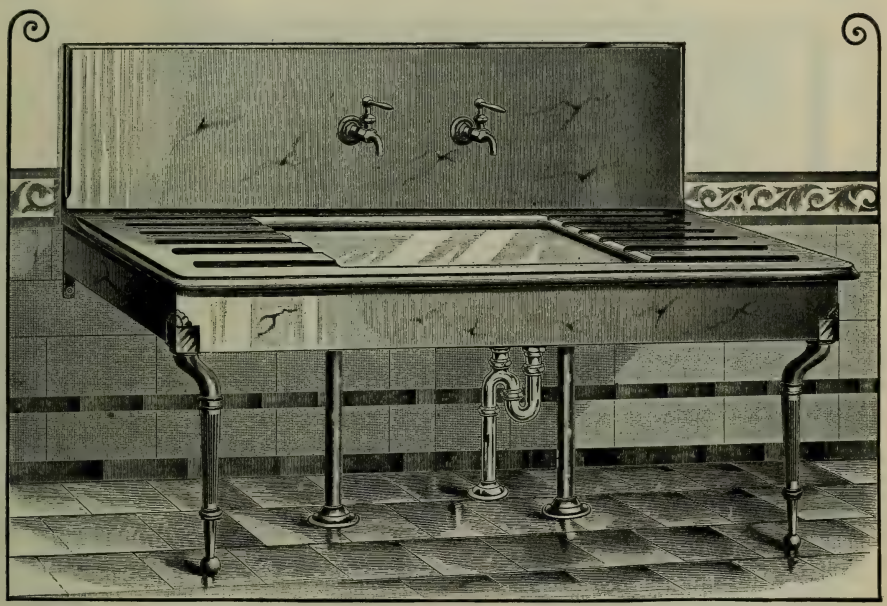
Size of Sink.	Width of Drain Boards.	Class A.	Class B.
20 x 30 x 7 inches,	19½ inches,	$75.50	$69.50
23 x 36 x 7 inches,	21½ inches,	80.50	73.00
24 x 42 x 7 inches,	22½ inches,	87.50	78.00
24 x 48 x 7 inches,	22½ inches,	95.50	83.50
If with Porcelain Legs, add		7.00	5.00
If without Drain Board with End Hinges, deduct		$12.00	
If without Drain Board with Adjustable Support, deduct,		16.50	

Dimensions of Sinks are outside, except depth, which is inside. Recess is 4 inches and is not included in width given above. Distance of Drain Boards from wall, 5 inches.

Wood Mats should be used with these Sinks to prevent damage to bottom of the Sink by placing of kettles, etc. For prices see page 711.

Nothing could be more suitable and attractive for Kitchen Sinks than American Porcelain, the increased demand for which has led us to perfect the ware until it is now vastly superior to Marble, Enameled Iron and all other materials used for sanitary appliances. Its hard, smooth glaze presents an unbroken, highly finished surface which renders it, unlike Marble, entirely impervious to grease and other stains, while it is easily kept clean and is practically indestructible. Moulded in one piece with free, rounded corners, the lodgment of foreign matter is impossible as there are no angles or crevices. The Porcelain Legs not only add to the beauty and strength of the fixture, but obviate the polishing necessary for metal.

CLOW'S PORCELAIN KITCHEN SINKS.



S-95.

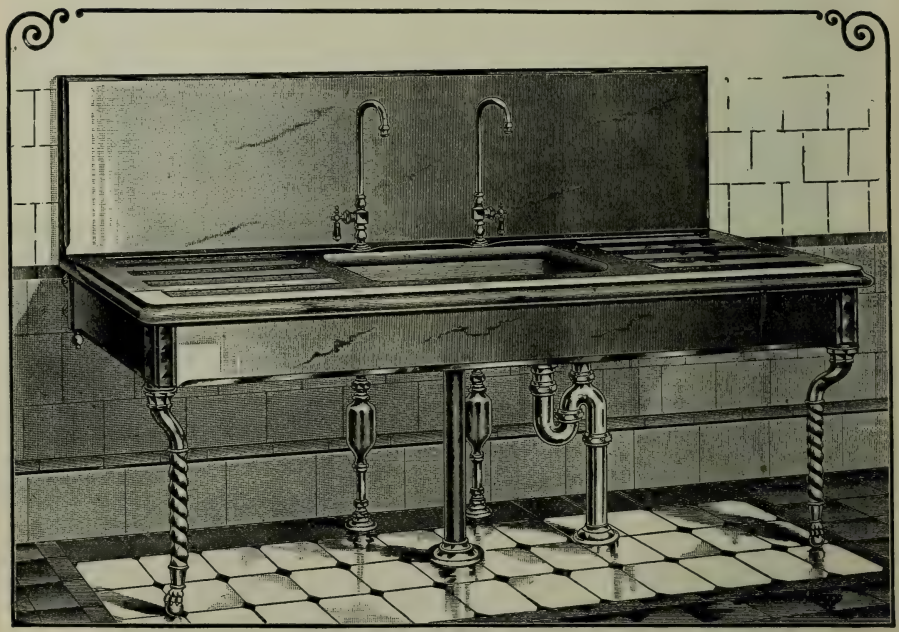
Includes Porcelain Kitchen Sink, with 1½-inch Countersunk Marble Top and 20-inch Double Drain-board, Marble Back 18 inches high, and 8-inch Aprons, Front and Ends. Nickel-plated Brass Offset Legs, Apron Supports, 1½-inch Nickel-plated Brass Trap, with Waste to Floor and Vent to Wall. Nickel-plated Brass Supports, ¾-inch Nickel-plated Fuller Plain Bibbs, with Flange and Thimble, complete.

DIMENSIONS AND PRICES.

Size of Sink,	Inches	30 x 20	36 x 23
Depth of Sink,	Inches	7	7
Length of Marble,	Inches	66	72
Width of Marble,	Inches	25	28
Price as described, with Italian Marble,		$87.00	$100.00
Price as described, with Pink Tennessee Marble,		87.00	100.00

Above can also be furnished with Right or Left Hand End.

CLOW'S PORCELAIN PANTRY SINKS.



S-100.

Porcelain Pantry Sink with 1¼-inch Countersunk Marble Top and 20-inch Double Drain Board, 18-inch Back and 8-inch Aprons; Nickel Plated Ideal Standing Waste, Nickel Plated Brass Offset Legs, Apron Supports, 1¼-inch Trap with Waste and Vent, Nickel Plated Brass Support, No. 2 Fuller Pantry Cocks, and Supply Pipes with Air Chambers.

DIMENSIONS AND PRICES.

Size of Sink, Inches	23 x 16	24 x 17	28 x 17	30 x 20
Length of Marble, Inches	60	60	64	66
Width of Marble, Inches	22	24	24	27
Price as described, with Italian or Tennessee Marble,	$89.00	$92.00	$96.00	$102.00

S-101. Same as above, with Right Hand End, same price.
S-102. Same as above, with Left Hand End, same price.

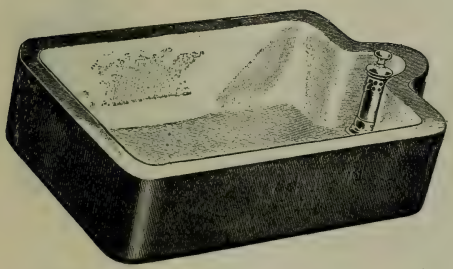
CLOW AMERICAN PORCELAIN KITCHEN SINKS.



S-102.

PRICES.

Size of Sink. With Strainer and Coupling.	Class A.	Class B.
20 x 30 x 7	$15.50	$11.60
23 x 36 x 7	18.50	13.70
24 x 42 x 7	21.50	15.80
24 x 48 x 7	29.50	21.40

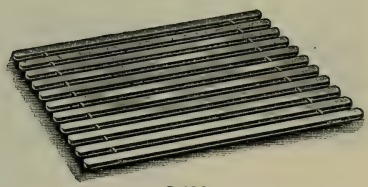


S-104.

American Porcelain Recessed Pantry Sink with Ideal Waste.

PRICES.

Size of Sink.	Class A.	Class B.
17 x 24 x 6	$13.50	$10.50
17 x 28 x 7	15.50	11.90
20 x 30 x 7	17.50	13.30
If without Ideal Waste, deduct	3.50	



S-106.

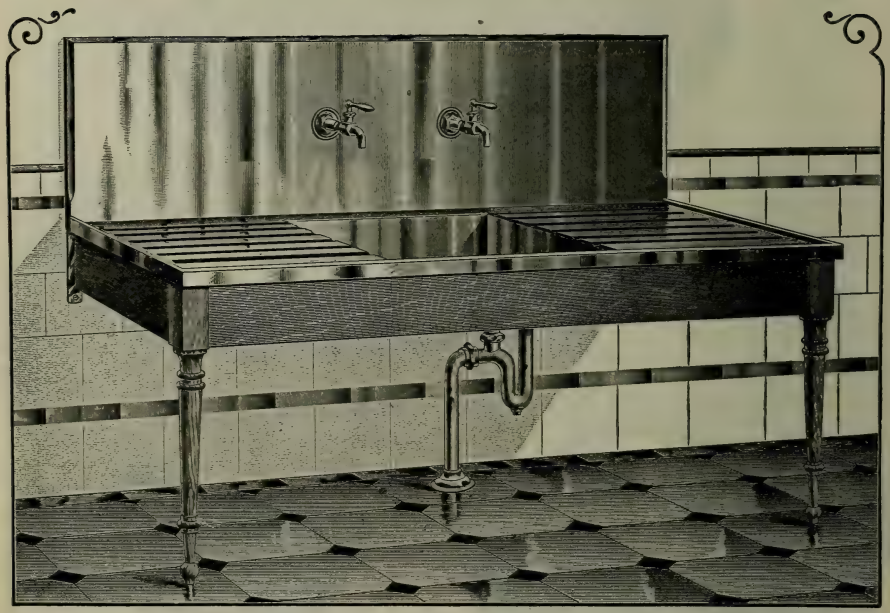
Wood Sink Mat.

Size of Mat.	Size of Sink.	Price.
16 x 37	48 inches	$6.50
17 x 31	42 inches	5.50
16 x 25	36 inches	4.00
12 x 22	30 inches	2.70
10 x 18	28 inches	2.00
9 x 14	24 inches	2.00

S-106. These Mats are designed for use in the bottoms of Porcelain Sinks and on Marble Drain Boards, and are made of Hardwood Slats firmly joined by Brass Rods. They not only prevent breakage of China, but also protect the highly finished surfaces of fixtures.

CLOW AJAX WHITE METAL PANTRY SINKS.

WITH DRAIN BOARDS.



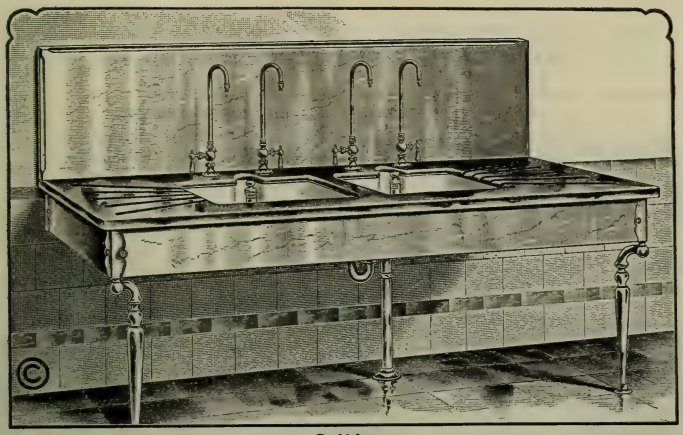
S-111.

Ajax White Metal Pantry Sink with Connected Overflow and Waste, Hardwood Back and Grooved Drain Boards covered with White Metal. Oak Frame and Turned Legs, 1¼-inch Nickel Plated Trap with Vent and ¾-inch Nickel Plated Fuller Faucets.

DIMENSIONS AND PRICES.

Size of Sink, Inches	14 x 20	16 x 24	16 x 30	18 x 30	20 x 30
Length over all, Inches	62	66	72	72	72
Width over all, Inches	21	23	23	25	27
Price, complete as described,	$91.00	$95.75	$103.00	$111.00	$126.00
If with Copper instead of Ajax White Metal,	58.00	61.00	67.00	71.00	78.00

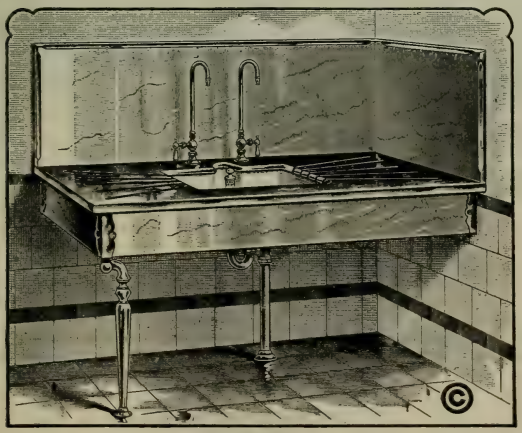
CLOW COPPER PANTRY SINKS.



S-114.

DIMENSIONS.

Size of Sink,	Inches,	14x20	16x24	16x30
Width of Top,	Inches,	24	26	26
Total Length,	Feet,	7	8	9



S-116.

DIMENSIONS.

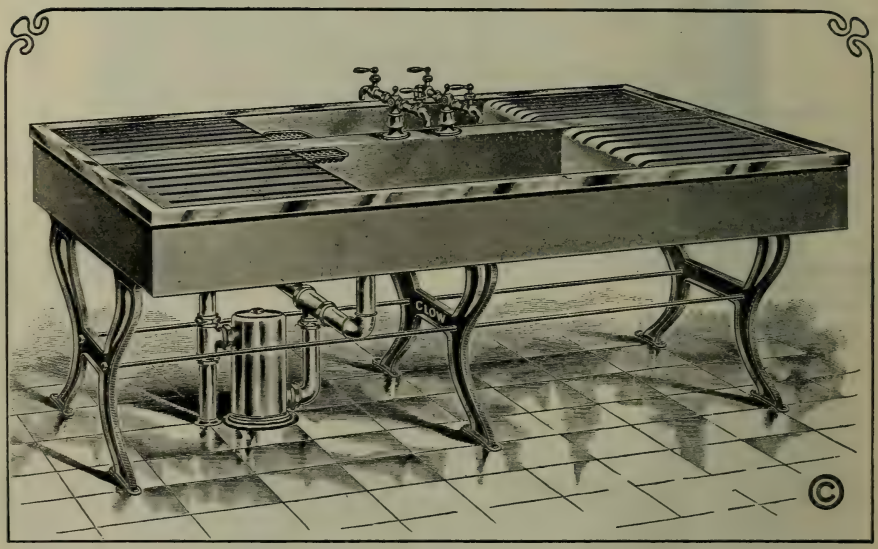
Size of Sink,	Inches,	14x20	16x24	16x30
Width of Top,	Inches,	24	26	26
Total Length,	Feet,	5	5½	6

S-114 and S-116. Ajax White Metal or Copper Recess Pantry Sinks with Nickel Plated Ideal Standing Overflow, Hardwood Top and Grooved Drain Board covered with Ajax White Metal, or Copper, No. 6 Nickel Plated Fuller Pantry Cocks, 1¼-inch S Trap, 18-inch Italian Marble Back, 8-inch Marble Apron, with Recess Legs and Apron Support.

PRICES ON APPLICATION. Can make any other size and can furnish Wood Backs and Aprons covered with either kind of Metal.

CLOW DOUBLE SLATE KITCHEN SINKS.

FOR HOTELS RESTAURANTS AND INSTITUTIONS.



S-119.

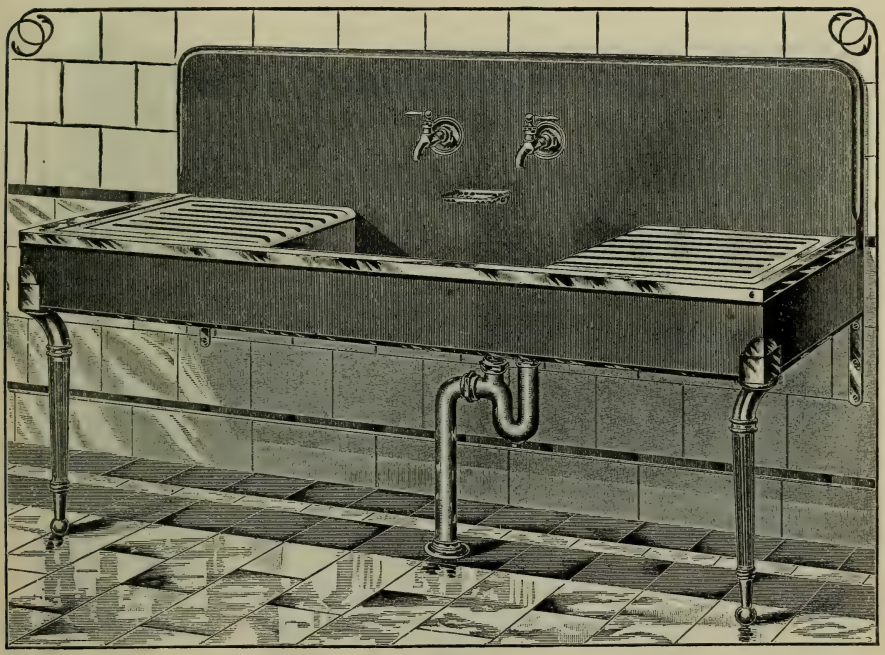
Double Kitchen Sink with 18-inch Grooved Drain Boards, 8-inch Apron, Slate Capping, Polished Brass Rims, Cocks and Standards, Galvanized Iron Soap Cups, Polished Brass Strainer and Grease Trap with Waste and Vent Connections, Galvanized Iron Frame and Standards.

DIMENSIONS AND PRICES.

Size of Sink,	Inches	20x30	20x36	20x40	22x48
Total Length,	Inches	66	72	76	84
Price, as described,		$133.00	$137.50	$141.50	$150.50
Price, as described, without Polished Brass Rim,		119.50	123.00	126.50	134.50

If without Brass Trap and Waste Connections, deduct $20.00.

CLOW "VIRGINIA" STONE OR SLATE KITCHEN SINKS.



S-123.

Kitchen Sink with 8-inch Aprons, 20-inch Back, 18-inch Grooved Drain Boards, Polished Brass Rim, Galvanized Iron Legs and Brackets, 1¼-inch Polished Brass Trap with Waste and Vent, Polished Brass Fuller Bibbs and Soap Cup.

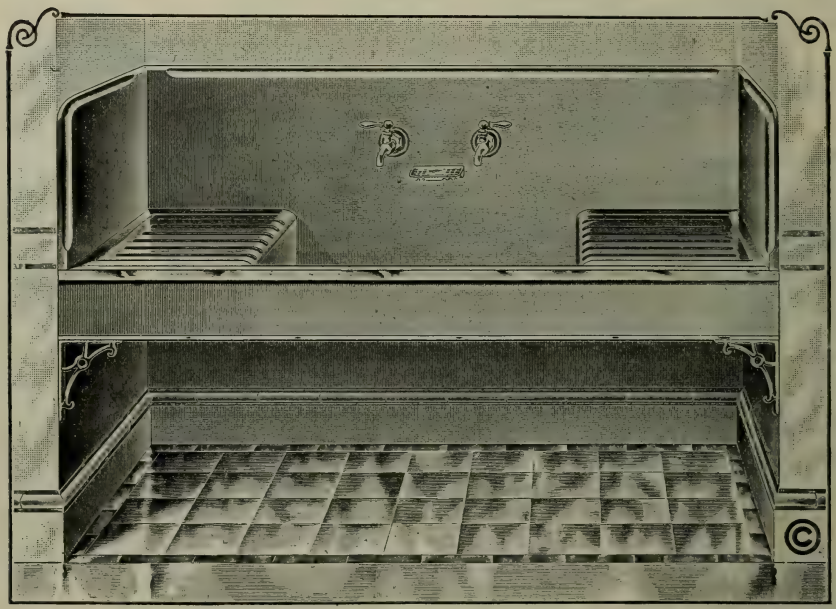
DIMENSIONS AND PRICES.

Size of Sink, - - - - - - Inches	18 x 24	20 x 30	20 x 36	20 x 40	22 x 42	22 x 48	24 x 48
Total Length, - - - - - - Inches	60	66	72	76	78	84	84
Price, as described, - - - - - - - -	$46.25	$48.75	$51.00	$53.00	$55.25	$57.50	$58.75
Price, as described, without Polished Brass Rim,	40.25	42.00	43.75	45.50	47.50	49.50	50.50

If with Polished Brass Legs and Brackets and Bronzed Iron Frame, add $13.00.
If without Soap Cup, deduct 50 cents.
If without Brass Trap, deduct $5.00.
If Trimmings are Nickel Plated, add $6.50.

Sinks will be made with right or left hand ends, without extra charge.

CLOW "VIRGINIA" STONE OR SLATE KITCHEN SINKS.



S-126.

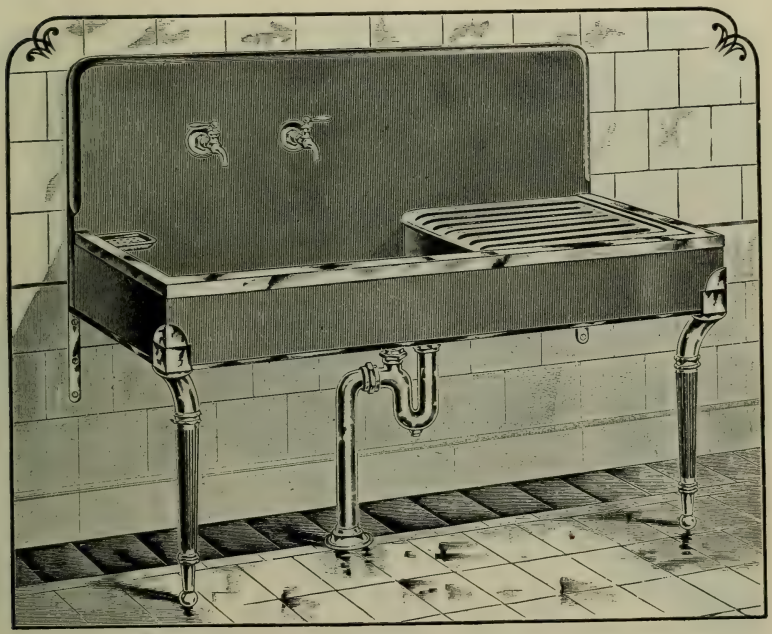
Kitchen Sink with 8-inch Apron, 16-inch Back and Ends, 18-inch Grooved Drain Boards, Polished Brass Rim, Galvanized Iron Brackets, Polished Brass Fuller Bibbs and Soap Cup.

DIMENSIONS AND PRICES.

Size of Sink, Inches,	18 x 24	20 x 30	20 x 36	20 x 40	22 x 42	22 x 48	24 x 48
Total Length, Inches,	60	66	72	76	78	84	84
Price, as described,	$41.75	$44.00	$46.00	$48.00	$50.25	$52.50	$54.00
Price, as described, without Polished Brass Rim,	38.00	39.75	41.50	43.25	45.25	47.25	48.75

If Brass Rim is Nickel Plated, add $3.50.
If without Soap Dish, deduct $0.50.

CLOW "VIRGINIA" STONE OR SLATE KITCHEN SINKS.



S-129.

Kitchen Sink with 8-inch Aprons, 16-inch Back, 24-inch Grooved Drain Board, Polished Brass Rim, Galvanized Iron Legs and Frame, 1¼-inch Polished Brass Trap with Waste and Vent, Polished Brass Fuller Bibbs and Soap Cup.

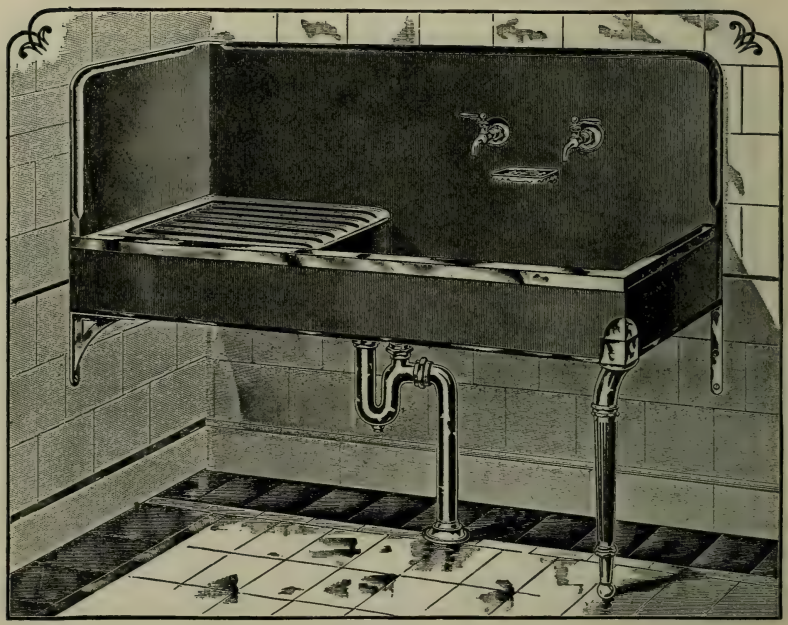
DIMENSIONS AND PRICES.

Size of Sink, Inches,	18 x 24	20 x 30	20 x 36	20 x 40	22 x 42	22 x 48	24 x 48
Total Length, Inches,	48	54	60	64	66	72	72
Price, as described,	$38.25	$40.25	$42.00	$43.75	$45.25	$47.25	$49.25
Price, as described, without Polished Brass Rim,	33.00	34.25	35.50	37.00	38.25	40.00	41.75

If with Polished Brass Legs and Brackets and Bronzed Iron Frame, add $13.00; if without Soap Cup, deduct 50 cents; if without Brass Trap, deduct $5.00.

If Trimmings are Nickel Plated, add $6.50.

CLOW "VIRGINIA" STONE OR SLATE KITCHEN SINKS.



S-131.

Kitchen Sink with 8-inch Aprons, 16-inch Back and Left Hand End, 24-inch Grooved Drain Board, Polished Brass Rim, Galvanized Iron Leg and Brackets, 1¼-inch Polished Brass Trap with Waste and Vent, Polished Brass Fuller Bibbs and Soap Cup.

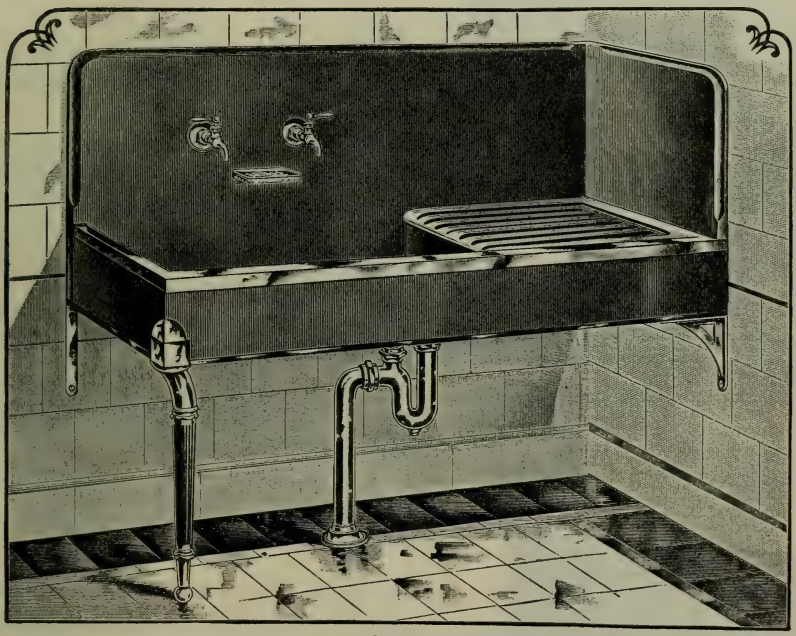
DIMENSIONS AND PRICES.

Size of Sink, Inches,	18 x 24	20 x 30	20 x 36	20 x 40	22 x 42	22 x 48	24 x 48
Total Length, Inches,	48	54	60	64	66	72	72
Price, as described,	$40.25	$42.25	$44.00	$45.75	$47.25	$49.25	$51.25
Price, as described, without Polished Brass Rim,	35.00	36.25	37.50	39.00	40.25	42.00	43.75

If with Polished Brass Legs and Brackets and Bronzed Iron Frame, add $7.50; if without Soap Cup, deduct 50 cents; if without Brass Trap, deduct $5.00.

If Trimmings are Nickel Plated, add $6.50.

CLOW "VIRGINIA" STONE OR SLATE KITCHEN SINKS.



S-134.

Kitchen Sink with 8-inch Aprons, 16-inch Back and Right Hand End, 24-inch Grooved Drain Board, Polished Brass Rim, Galvanized Iron Leg and Brackets, 1¼-inch Polished Brass Trap with Waste and Vent, Polished Brass Fuller Bibbs and Soap Cup.

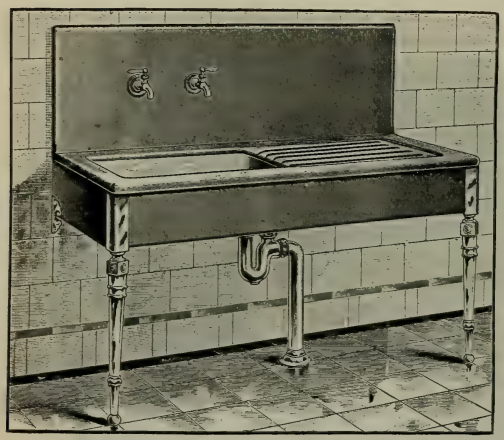
DIMENSIONS AND PRICES.

Size of Sink, Inches,	18 x 24	20 x 30	20 x 36	20 x 40	22 x 42	22 x 48	24 x 48
Total Length, Inches,	48	54	60	64	66	72	72
Price, as described,	$40.25	$42.25	$44.00	$45.75	$47.25	$49.25	$51.25
Price, as described, without Polished Brass Rim,	35.00	36.25	37.50	39.00	40.25	42.00	43.75

If with Polished Brass Legs and Brackets and Bronzed Iron Frame, add $7.50; if without Soap Cup, deduct 50 cents; if without Brass Trap, deduct $5.00.

If Trimmings are Nickel Plated, add $6.50.

CLOW "VIRGINIA" STONE OR SLATE KITCHEN SINKS.



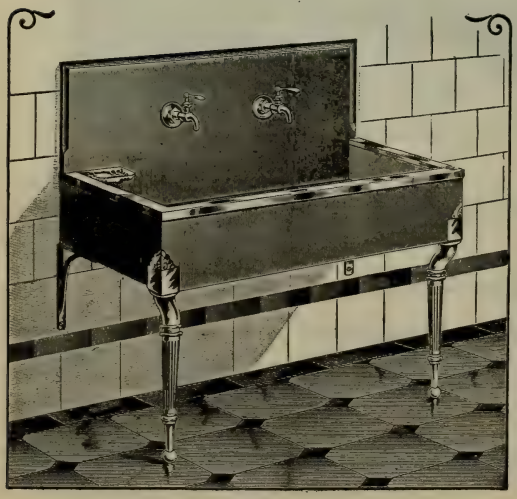
S-138.

S-138. Enameled Iron Kitchen Sink with "Virginia" Stone or Slate Top, 8-inch Aprons, 16-inch Back, 24-inch Drain Board, Galvanized Iron Legs, Polished Brass Fuller Bibbs, and Trap with Vent.

Size of Iron Sink.	Length of Slab.	Width of Slab.	Price, as described.
18 x 30 x 6	4 feet 6 inches,	22 inches,	$35.00
20 x 30 x 6	4 " 6 "	24 "	35.25
20 x 36 x 6	5 " 0 "	24 "	38.75
20 x 40 x 6	5 " 4 "	24 "	41.00
22 x 42 x 6	5 " 6 "	26 "	43.50

If with Polished Brass Legs, add $7.25.

If without Polished Brass Trap, deduct $5.00.



S-141.

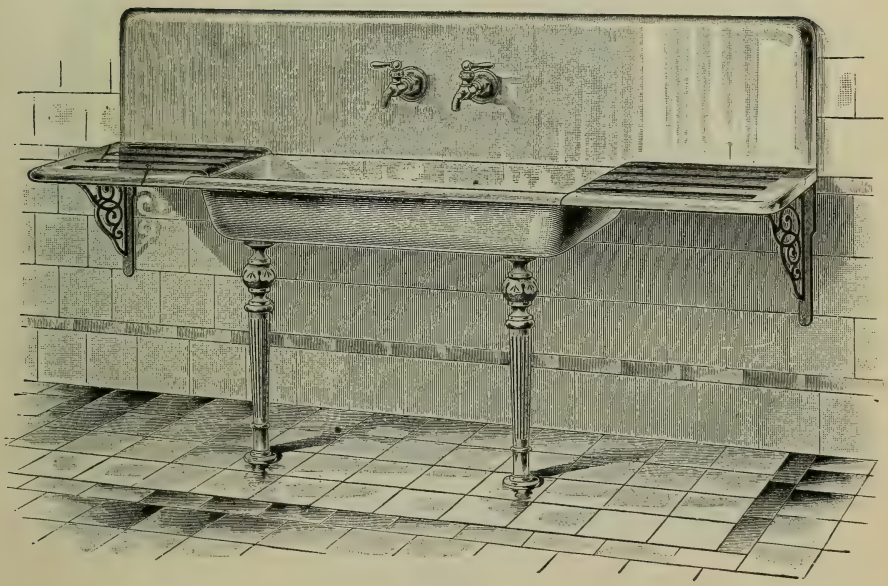
S-141. "Virginia" Stone or Slate Kitchen Sink, with 8-inch Aprons, 16-inch Back, Polished Brass Rim, Soap Cup, Strainer and Fuller Bibbs, Galvanized Legs and Brackets.

Size of Sink.	Price, as described.	Price, without Brass Rim.
18 x 24 x 8 inches,	$20.25	$16.50
20 x 30 x 8 "	22.00	17.25
20 x 36 x 8 "	23.00	18.00
20 x 40 x 8 "	24.00	18.75
22 x 42 x 8 "	25.25	19.75
22 x 48 x 8 "	27.00	21.25
24 x 48 x 8 "	28.50	22.50

If with Polished Brass Legs and Brackets and Bronzed Iron Frame, add $13.00.

If with Polished Brass Trap, add $5.00.

CLOW ROLL-RIM KITCHEN SINKS.



S-146.

Enameled Iron Roll-rim Sink, 15-inch Back with Air Chambers, Painted Iron Legs and Brackets, two Drain Boards, and Nickel Plated Fuller Bibbs.

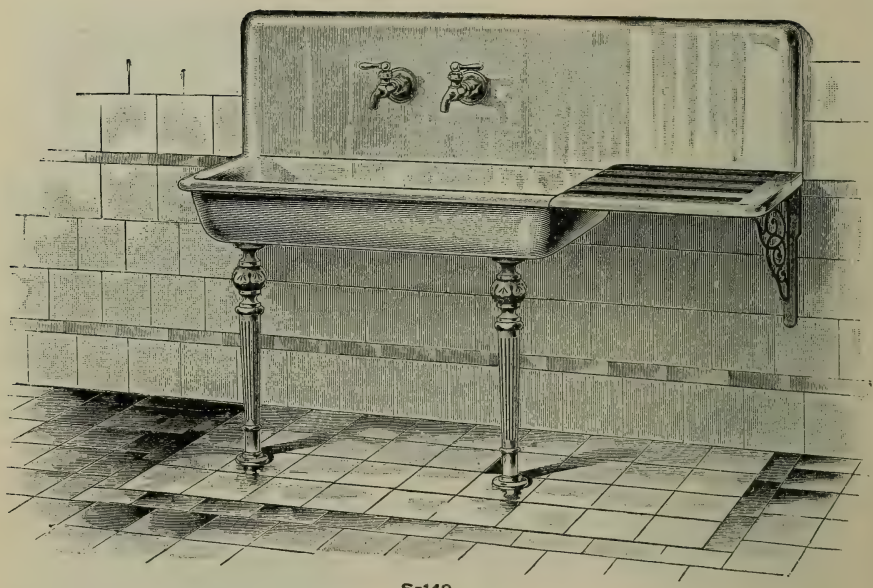
PRICES.

Backs, on account of length, are in two pieces.

Size of Sinks.	With 18-inch Oak Drain Boards.	With 24-inch Enameled Drain Boards.
18 x 30, as shown and described,	$27.25	$31.75
20 x 30, " " " "	28.25	33.75
20 x 36, " " " "	29.75	35.25
20 x 40, " " " "	31.25	36.75

If Faucets are desired with Hose Ends, add, each, $0.25.
If return ends are wanted over Drain Boards, add for 18-inch sink, $2.75 ; for 20-inch sink, $3.00.
If with extra Cock Holes and Air Chambers, add, each, $1.00.
If without Faucets, deduct $2.25 per pair. If without Air Chambers, deduct, each, $1.00
If without Wood Drain Boards, deduct, each, $2.50.
Air Chambers are tapped for ¾-inch Faucets and ½-inch Supply. With each Air Chamber we furnish a piece of ½-inch galvanized pipe, 15 inches long.

CLOW ROLL-RIM KITCHEN SINKS.



S-149.

Enameled Iron Roll-rim Sink, 15-inch Back with Air Chambers. Painted Iron Legs and Brackets, Drain Board and Nickel Plated Fuller Bibbs.

PRICES.

Backs up to 5 feet are in one piece; over 5 feet, in two pieces.

Size of Sinks.	With 24-inch Oak Drain Board.	With 24-inch Enameled Drain Board.
18 x 30, as shown and described,	$23.50	$25.75
20 x 30, " " " "	24.50	27.25
20 x 36, " " " "	26.00	28.75
20 x 40, " " " "	27.50	30.25

If Faucets are desired with Hose Ends, add, each, $0.25.

If Return Ends are wanted over Drain Board, add for 18-inch sink, $2.75, for 20-inch sink, $3.00.

If with extra Cock Holes and Air Chambers, add, each, $1.00.

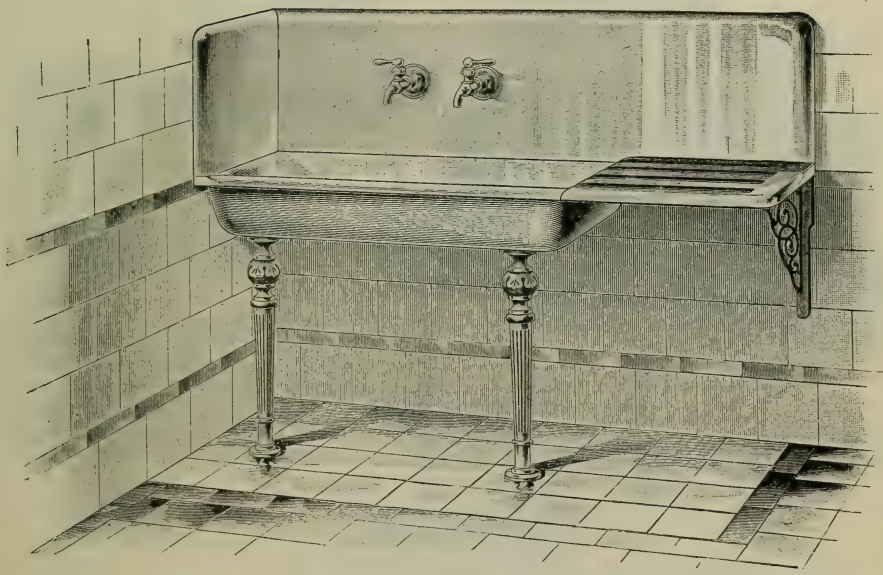
If without Faucets, deduct $2.25 per pair. If without Air Chambers, deduct, each, $1.00.

If without Wood Drain Board, deduct $2.50.

Air Chambers are tapped for ¾-inch Faucets and ½-inch supply. With each air chamber we furnish a piece of ½-inch galvanized pipe 15 inches long.

Drain Boards can be furnished on Left Hand if desired.

CLOW ROLL-RIM KITCHEN SINKS.



S-152.

Enameled Iron Roll-rim Sink, 15-inch Back with Air Chambers and Left Hand End, Painted Iron Legs and Bracket, Drain Board and Nickel Plated Fuller Bibbs.

PRICES.

Backs up to 5 feet are in one piece; over 5 feet, two pieces.

Size of Sinks.	With 24-inch Oak Drain Board.	With 24-inch Enameled Drain Board.
18 x 30, as shown and described,	$26.25	$28.50
20 x 30, " " " "	27.50	30.25
20 x 36, " " " "	29.00	31.75
20 x 40, " " " "	30.50	33.25

If Faucets are desired with Hose Ends, add, each, $0.25.

If return ends are wanted over Drain Boards, add for 18-inch sink, $2.75; for 20-inch sink, $3.00.

If with extra Cock Holes and Air Chambers, add, each, $1.00.

If without Faucets, deduct $2.25 per pair. If without Air Chambers, deduct, each, $1.00.

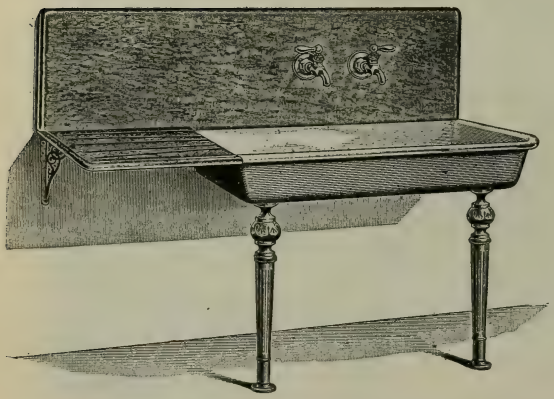
If without Wood Drain Board, deduct $2.50.

Air Chambers are tapped for ¾-inch Faucets and ½-inch Supply. With each Air Chamber we furnish a piece of ½-inch galvanized pipe 15 inches long.

Sinks can be furnished with Right Hand End and Drain Board on Left Hand End, if desired.

CLOW ENAMELED CAST IRON SINKS.

TENNESSEE MARBLE BACK AND DRAIN BOARD.



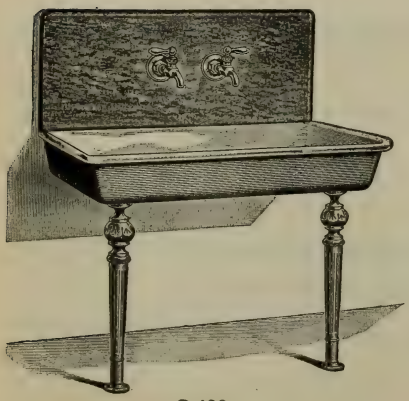
S-157.

S-157. Enameled Iron Roll-rim Sink with Metal Strainer, Iron Legs, ¾-inch Marble Back, 18 inches high, extending over Sink and Drain Board, 1¼-inch Marble Drain Board, 24 inches long, Nickel Plated Iron Bracket and Nickel Plated Fuller Flanged Bibbs for Lead Pipe.

Size of Sink.	Price as Described.
20x30, Tennessee Marble,	$26.25
20x36, " "	27.50
20x40, " "	28.50

Outlet is in Center.

Above can be furnished with Right or Left Hand Ends; Back and Drain Boards can be made to any size required.



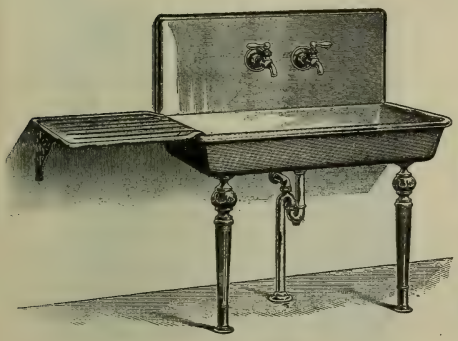
S-160.

S-160. Enameled Iron Roll-rim Sink with Painted Iron Legs and Metal Strainer, ¾-inch Marble Back, 18 inches high, Nickel Plated Fuller Flanged Bibbs for Lead Pipe.

Size of Sink.	Price as Described.
16x24, Tennessee Marble,	$12.25
18x30, " "	13.25
20x30, " "	14.75
20x36, " "	15.50
20x40, " "	17.00
22x42, " "	17.25

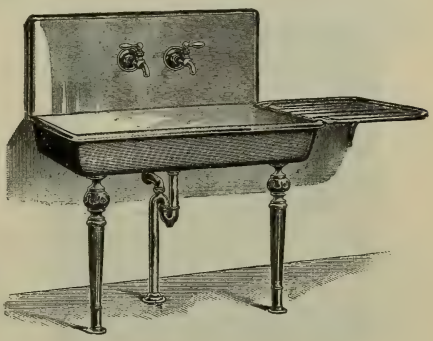
CLOW ENAMELED CAST IRON SINKS.

WITH ENAMELED CAST IRON REVERSIBLE DRAIN BOARDS.



S-165.

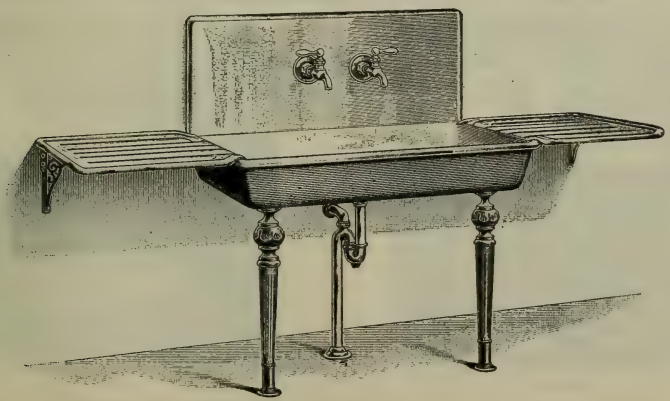
Enameled Cast Iron Roll-rim Sink, Back and Drain Board, on Bronzed Iron Legs, complete with Nickel Plated Fuller Bibbs and 1½ Brass S Trap with Vent.



S-167.

Enameled Cast Iron Roll-rim Sink, Back and Drain Board, on Bronzed Iron Legs, complete with Nickel Plated Fuller Bibbs and 1½ Brass S Trap with Vent.

SIZE ... INCHES	18x30	20x30	20x36	20x40	22x42
COMPLETE, AS SHOWN AND DESCRIBED	28.50	30.00	31.50	33.00	34.00



S-169.

Enameled Cast Iron Roll-rim Sink, Back and Drain Boards, on Bronzed Iron Legs, complete with Nickel Plated Fuller Bibbs and 1½-inch Brass S Trap with Vent.

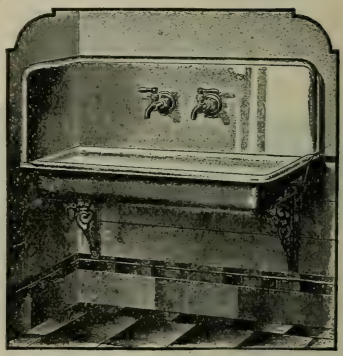
SIZE ... INCHES	18x30	20x30	20x36	20x40	22x42
COMPLETE, AS SHOWN AND DESCRIBED	33.25	35.25	36.75	38.25	39.75

CLOW'S ROLL-RIM KITCHEN SINKS.

CAST IRON.



S-173.



S-177.

SIZE . . . . . INCHES	16 x 24	18 x 30	18 x 36	20 x 30	20 x 36	20 x 40	22 x 36	22 x 42
S-173. GALVANIZED . . .	10.00	12.25	13.75	13.25	14.25	15.75	14.75	16.25
S-173. ENAMELED	14.00	16.25	17.75	17.25	18.75	20.25	19.25	20.75
S-177. GALVANIZED . . .	12.00	14.25	15.75	15.50	16.50	18.25	17.25	18.75
S-177. ENAMELED . . .	16.50	18.75	20.25	20.00	21.50	23.00	22.25	23.75



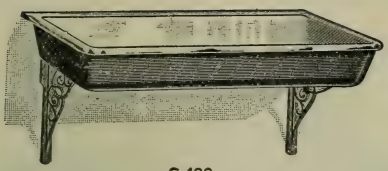
S-179.



S-182.

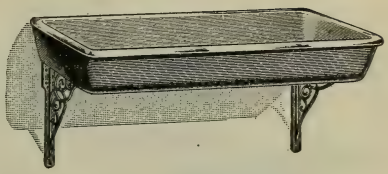
SIZE . . . . . INCHES	16 x 24	18 x 30	18 x 36	20 x 30	20 x 36	20 x 40	22 x 36	22 x 42
S-179. GALVANIZED . . .	10.50	12.75	14.25	13.75	14.75	16.25	15.25	16 75
S-179. ENAMELED	14.50	16.75	18.25	17.75	19.25	20.75	19.75	21.25
S-182. GALVANIZED . . .	12.25	14.50	16.00	15.75	16.75	18.50	17.50	19.00
S-182. ENAMELED	16.75	19.00	20.50	20.25	21.75	23.25	22.50	24.00

If without Faucets, deduct $2.25. Price includes Air Chambers, tapped for ½-inch Supply and ¾-inch Faucet.



S-186.

Roll-rim on front and both ends, with Brackets.



S-189.

Roll-rim on all four sides, with Brackets.

ENAMELED CAST IRON ROLL-RIM SINKS.—S-186 and S-189.

SIZE . . . . . INCHES	16x24	18x30	20x30	20x36	20x40	22x42
S-186 . . . . . EACH	6.50	7.00	8.00	8.50	9.25	9.50
S-189 . . . . . EACH	8.50	9.00	10.00	10.50	11.25	12.00



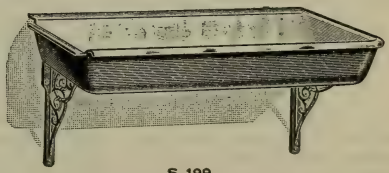
S-194.

Roll-rim on front, depressed on both ends for marble or wood Drain Board, with Brackets.



S-196.

Roll-rim on front and left hand end, depressed on right hand end for marble or wood Drain Board, with Brackets



S-199.

Roll-rim on front and right hand end, depressed on left hand end for marble or wood Drain Board, with Brackets.

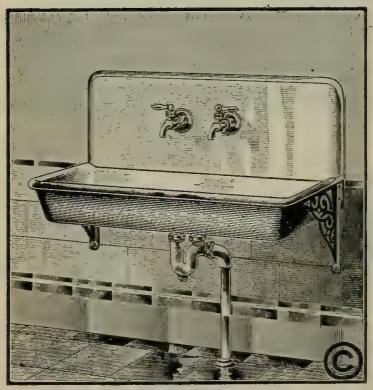
ENAMELED CAST IRON SINKS, DEPRESSED ENDS.

SIZE . . . . . INCHES	16x24	18x30	20x30	20x36	20x40	22x42
S-194, S-196 OR S-199 . . . . . EACH	6.50	7.00	8.00	8.50	9.25	9.50

CLOW "TENAX" WROUGHT STEEL SINKS.

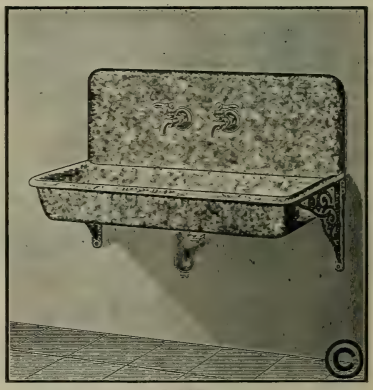
ROLL-RIM.

UNSURPASSED FOR CLEANLINESS, DURABILITY AND BEAUTY.



S-205.

Roll-Rim Sink, Enameled Inside and Painted Outside, 15-inch Roll-Rim Enameled Back, Painted Iron Brackets, Nickel Plated ½-inch Fuller Bibbs and 1¼-inch Brass S Trap, vented.



S-207.

Roll-Rim Sink, Galvanized Inside and Outside, with 15-inch Roll-Rim Back, Galvanized Brackets, Polished Brass ½-inch Fuller Bibbs and 1¼-inch extra heavy Lead S Trap, vented.

Our "Tenax" Sinks are drawn from one plate of Steel and are superior to the Cast-Iron Sinks in every particular, being lighter, stronger and more durable. The bottom slopes to the center and the outlet, giving perfect drainage. They are secured to the brackets by a simple device, leaving the rim free from screws.

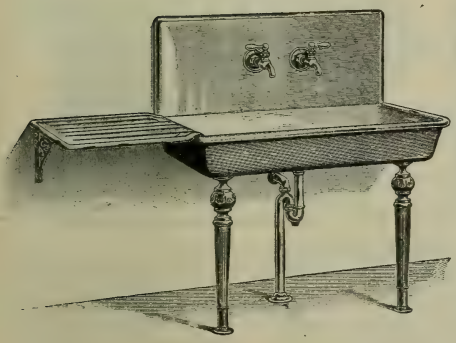
Every Sink is branded "Clow's Tenax," a guarantee of its superiority.

SIZE . . . . . INCHES	16x24	18x30	18x36	20x30	20x36	20x40
S-205. WHITE ENAMELED, COMPLETE . . . . EACH	13.25	15.00	17.00	16.00	18.00	19.25
S-207. GALVANIZED, COMPLETE . . . . . EACH	5.50	7.50	8.25	8.00	8.75	9.75

Steel Strainer with Rubber Plug for holding water in Sink can be substituted for regular Strainer. Extra, 35 cents net. Sinks furnished with Patent Overflow, extra, 50 cents net.

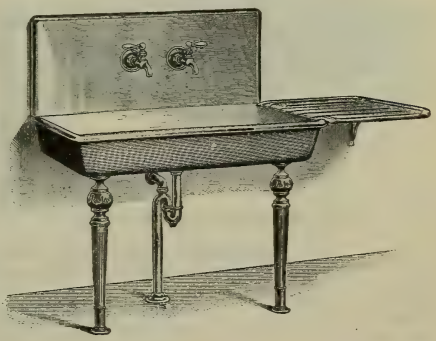
CLOW TENAX WROUGHT STEEL SINKS.

WITH 24-INCH ENAMELED DRAIN BOARDS.



S-211.

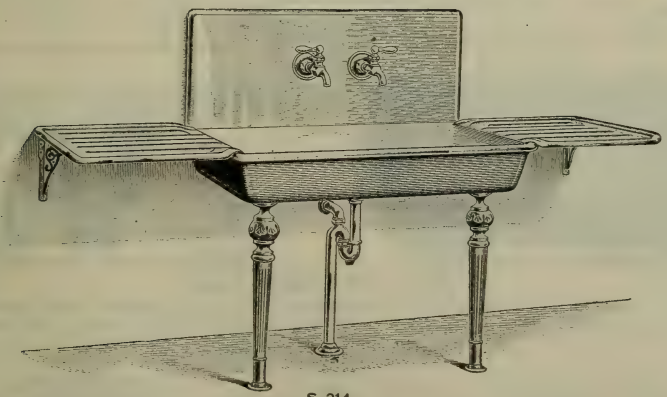
Roll-rim Tenax Steel Sink, Enameled Inside, with Roll-Rim Enameled Back, Enameled Drain Board on left hand end, Painted Iron Brackets, N. P. Compression Bibbs marked Hot and Cold, and 1½-inch Brass S Trap with Vent.



S-213.

Roll-rim Tenax Steel Sink, Enameled Inside, with Roll-rim Enameled Back, Enameled Drain Board on right hand end, Painted Iron Brackets, N. P. Compression Bibbs marked Hot and Cold, and 1½-inch Brass S Trap with Vent.

SIZE . . . . . INCHES	18x30	20x30	20x36	20x40
COMPLETE, AS SHOWN AND DESCRIBED, ...	22.00	23.00	25.00	26.50



S-214.

Roll-rim Tenax Steel Sink, Enameled Inside, with Roll-rim Enameled Back, Enameled Drain Board on each end, Painted Iron Brackets, N. P. Compression Bibbs marked Hot and Cold, and 1½-Brass S Trap with Vent.

SIZE . . . . . INCHES	18x30	20x30	20x36	20x40
COMPLETE, AS SHOWN AND DESCRIBED, ...	27.00	28.00	30.00	31.50

WROUGHT STEEL SINKS.



S-223. COLUMBUS ROLL-RIM SINK.



S-225. COLUMBUS ROLL-RIM SINK BACK.

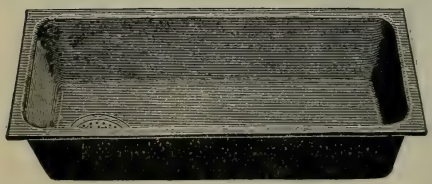
COLUMBUS ROLL-RIM STEEL SINKS (Brackets Extra).—S-223.

SIZE . . . . . INCHES	16 x 24	18 x 30	18 x 36	20 x 30	20 x 36	20 x 40
PAINTED . . . . . EACH	2.70	3.70	4.45	4.45	5.50	5.85
GALVANIZED . . . . . EACH	3.95	5.00	6.15	6.15	7.55	8.35
BLUE ENAMELED . . . . . EACH	4.50	5.70	6.60	6.60	7.85	9.45
WHITE ENAMELED . . . . . EACH	7.55	9.95	10.95	10.95	11.90	12.90

Sinks furnished with Rubber Stoppers, extra, each, 25 cents net; Patent Overflow, extra, each, 50 cents net. Brackets, per pair, Plain, $1.00; Painted, $1.15; Galvanized, $1.45; Blue Enameled, $2.50.

COLUMBUS ROLL-RIM SINK BACKS (15 Inches High).—S-225.

WIDTH . . . . . INCHES	24	30	36	40
PAINTED . . . . . EACH	1.60	1.90	2.20	2 60
GALVANIZED . . . . . EACH	2.20	2.60	3.00	3.50
BLUE ENAMELED . . . . . EACH	3.10	4.10	5.10	6.20
WHITE ENAMELED . . . . . EACH	4.00	5.00	6.00	7.10



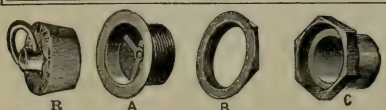
S-227. COLUMBUS STEEL SINK.



S-229. COLUMBUS SINK CONNECTION.

COLUMBUS STEEL SINKS.—S-227.

SIZE . . . . . INCHES	16 x 24	18 x 30	18 x 36	20 x 30	20 x 36	20 x 40
PAINTED . . . . . EACH	2.00	2.50	3.00	3.00	3.70	4.00
GALVANIZED . . . . . EACH	4.00	5.10	6.50	6.25	7.75	8.50
WHITE ENAMELED . . . . . EACH	7.50	9.50	11.00	10.50	12.00	13.00



S-231. IMPROVED BRASS COUPLINGS.

S-229. When sold separate from Sink, each, 50 cents net.

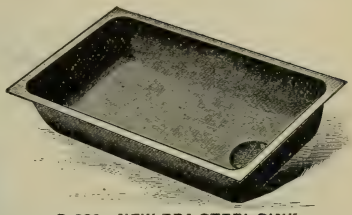
S-231. When sold separate from Sink, each, 75 cents net.

Rubber Plug couplings are made *without cross piece* for screw shown in ferrule "A."

WROUGHT STEEL SINKS.



S-237. NEW ERA ROLL-RIM STEEL SINK.



S-239. NEW ERA STEEL SINK.

NEW ERA ROLL-RIM STEEL SINKS.—S-237.

SIZE INCHES	16 x 24	18 x 30	18 x 36	20 x 30	20 x 36	20 x 40
PAINTED EACH	2.25	2.70	3.25	3.25	4.00	4.30
GALVANIZED EACH	2.70	3.55	4.30	4.30	5.10	5.90
BLUE ENAMELED EACH	3.55	4.30	4.80	4.80	5.35	6.95
WHITE ENAMELED EACH	5.90	7.60	9.45	9.45	11.55	12.65

Sinks furnished with Rubber Stoppers extra, each, 25 cents net; Patent Overflow extra, each, 50 cents net. Brackets, per pair, Plain, $1.00; Painted, $1.15; Galvanized, $1.45; Blue Enameled, $2.50.

ROLL-RIM SINK BACKS (15 Inches High).

WIDTH INCHES	24	30	36	40
PAINTED EACH	1.60	1.90	2.20	2.60
GALVANIZED EACH	2.20	2.60	3.00	3.50
BLUE ENAMELED EACH	3.10	4.10	5.10	6.20
WHITE ENAMELED EACH	4.00	5.00	6.00	7.10

Sink Backs drilled with two Cock Holes unless otherwise ordered.

NEW ERA STEEL SINKS.—S-239.

SIZE INCHES	16 x 24	18 x 30	18 x 36	20 x 30	20 x 36	20 x 40
PAINTED EACH	2.00	2.50	3.00	3.00	3.70	4.00
GALVANIZED EACH	4.00	5.10	6.50	6.25	7.75	8.50
*BLUE ENAMELED EACH	4.80	6.00	6.75	6.75	7.50	9.75
WHITE ENAMELED EACH	7.50	9.50	11.00	10.50	12.00	13.00

*Enameled inside and outside in a Purplish Blue color.



S-241.



S-243.



S-244.



S-246.

S-241. Steel Strainer for Rubber Stopper, each, 10 cents net; S-243, Rubber Stopper, each, 25 cents net; S-244, Iron Pipe Connection, 1¼ or 1½-inch, each, 10 cents net; S-246, "New Era" Coupling with Painted Strainer, Screws, Nuts and Washers complete, each, 30 cents net. "New Era" Couplings with Rubber Plug, Screws, Nuts and Washers complete, each, 50 cents net. White Metal Stoppers, each, 10 cents net.



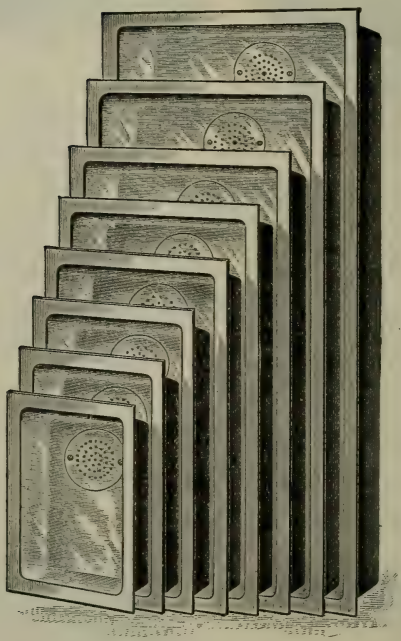
S-249.

OVAL STEEL PANTRY SINKS.—S-249.

SIZE, 14 X 20 X 6 WITH NICKEL PLATED STRAINER, BRASS COUPLING AND RUBBER PLUG EACH	Painted.	Galvanized.	White Enameled.
	2.00	3.50	6.50

Oval Pantry Sinks with Patent Overflow, extra, each, 50 cents net.

CAST-IRON SQUARE SINKS.

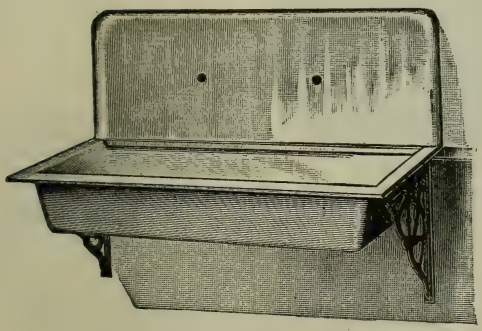


S-254.

SIZE . . . . . INCHES	12x18	14x20	15x27	16x24	16x28	16x30	18x24	18x30	18x32	18x36
PAINTED . . . . . EACH	1.25	1.50	2.00	1.80	2.10	2.25	2.10	2.50	3.00	3.00
GALVANIZED . . . . . EACH	2.60	3.20	4.25	4.00	4.50	4.75	4.30	5.10	6.25	6.50
WHITE ENAMELED . . . . EACH	4.75	6.00	7.25	6.50	7.50	7.75	7.00	8.50	9.50	9.50
SIZE . . . . . INCHES	20x24	20x30	20x36	20x38	20x40	20x42	22x42	20x48	22x62	24x50
PAINTED . . . . . EACH	2.40	3.00	3.70	3.80	4.00	4.25	4.25	5.30	10.75	7.50
GALVANIZED . . . . . EACH	5.00	6.25	7.75	8.00	8.50	9.00	9.00	11.50	22.00	16.00
WHITE ENAMELED . . . . EACH	7.50	9.00	10.50	11.00	11.50	12.00	12.00	13.35	26.00	18.00

Add to list, if with Patent Overflow: Painted, $1.00; Galvanized, $1.25; Enameled, $1.25.

CLOW FLAT RIM SINK AND ROLL RIM BACK.



S-260.

S-260. Sink enameled inside and on rim and painted outside, with painted iron brackets and enameled back, 12 inches high, 1 inch deep.

SIZES AND PRICES.	As Shown.	With Right or Left End Piece.
16 x 24 x 6,	$ 5.00	$ 6.50
18 x 30 x 6,	6.50	8.25
18 x 36 x 6,	8.00	9.75
20 x 30 x 6,	7.00	9.00
20 x 36 x 6,	8.75	10.75
20 x 40 x 6,	9.25	11.25
20 x 48 x 6,	11.75	13.75

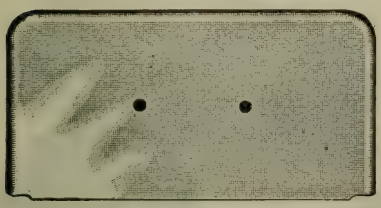
These are neat and sanitary sinks at a low price. The backs used are too shallow to permit the use of cast air chambers.



S-262. SINK BACK, SHALLOW PATTERN, 12 INCHES HIGH.

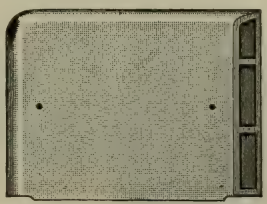
Length, Inches	24	30	36	40	42	48
Price, Enameled or Galvanized,	$2.50	$3.00	$3.65	$4.35	$4.85	$5.75

These backs are too shallow to permit the use of cast iron air chambers.



S-264. SINK BACK, DEEP PATTERN, 12 INCHES HIGH.

Length, Inches	30	36	40	42
Price, Enam. or Galv.,	$3.50	$4.25	$5.00	$5.50

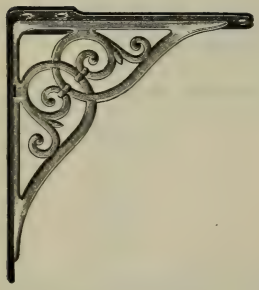


S-266. END FOR DEEP SINK BACKS, 15 INCHES HIGH.

Length, Inches	18	20	22
Price, Enam. or Galv.,	$3.50	$3.75	$4.00

Made for either right or left hand corner.

S-264. Deep Pattern Backs also made 15 inches high at additional cost.
Galvanized iron air chambers add to list $1.00 for each air chamber.



S-271. IRON SINK BRACKET.

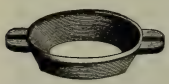
IRON SINK BRACKETS.—S-271.

NUMBER	1 (15 x 16 inches)	2 (16 x 18 inches)	3 (15 x 20 inches)
PAINTED EACH	.36	.46	.65
GALVANIZED EACH	.54	.65	.90
ENAMELED EACH	.95	1.00	1.40



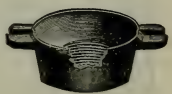
S-276. STRAINER.

Painted, each, .12
Galvanized, each, .20
Enameled, each, .20



S-277. COUPLING FOR LEAD PIPE.

Painted, each, .12
Galvanized, each, .20



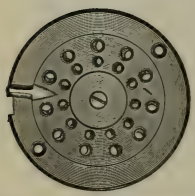
S-278. IRON PIPE COUPLING.

Size, Inches,	1¼	1½	2
Each,	.30	.40	.50



S-280. SINK PLUG.

Painted, .40
Galvanized, .50
Enameled, .60



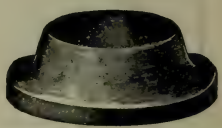
S-282. COMBINED STRAINER AND PLUG.

	Plain Brass.	Nickel Plated.
4½ in. in Diam.	1.00	1.15
4⅝ in. in Diam.	1.10	1.20
4¾ in. in Diam.	1.15	1.25
5 in. in Diam.	1.25	1.35



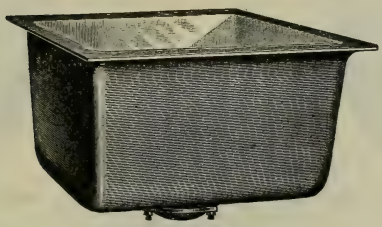
S-283. SINK BOLT.

Long Iron, per doz., .40
Long Brass, per doz., 1.00
Long Nickel Plated, per doz., 1.25
Short Brass, per doz., .50



S-284. RUBBER SINK GASKET.

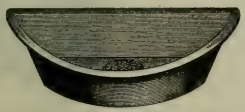
Per dozen, 1.50



S-290. SLOP SINK.

SIZE . . . . . INCHES	16 x 16	20 x 14	20 x 16	23 x 15	24 x 20	30 x 20	36 x 20	48 x 20
DEPTH . . . . . INCHES	10	12	12	15	12	12	12	17
PAINTED . . . . . EACH	2.70	3.50	4.00	4.25	5.00	8.00	10.00	------
GALVANIZED . . . . . EACH	5.25	6.50	8.25	8.50	9.50	15.00	19.00	------
ENAMELED . . . . . EACH	7.50	8.50	10.00	11.00	11.50	16.00	20.00	------

Add for Patent Overflow, $1.00; for Patent Overflow and Plug Strainer, $1.50.



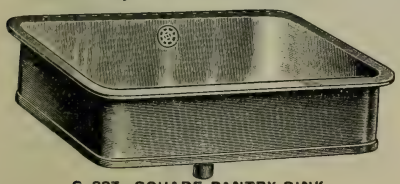
S-292. HALF CIRCLE SINK.



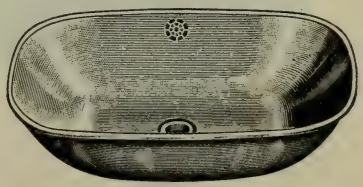
S-295. CORNER SINK.

No.	Back, Inches.	Width, Inches.	Painted, Each.	Galvanized, Each.	Enameled, Each.
1	24	14	1.50	3.25	6.00
2	27	15	1.80	3.90	7.00
3	29	16	2.00	4.75	8.00
4	31	17	2.25	5.00	9.00

No.	Side, Inches.	Front, Inches.	Painted, Each.	Galvanized, Each.	Enameled, Each.
1	17	25	1.25	2.75	6.00
2	20	28	1.75	3.50	7.00
3	22	31	2.10	4.20	8.00



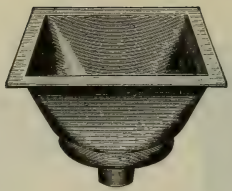
S-297. SQUARE PANTRY SINK.



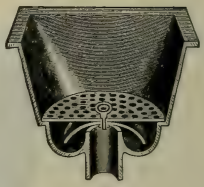
S-299. OVAL PANTRY SINK.

COPPER AND GERMAN SILVER PANTRY SINKS.—S-297 and S-299.

SIZE . . . . . INCHES	12 x 18	12 x 20	14 x 16	14 x 20	14 x 24	16 x 24	16 x 30	18 x 30
SQUARE, COPPER . . . . . EACH	4.50	5.00	4.50	6.00	7.00	8.00	10.00	11.00
OVAL, COPPER . . . . . EACH	6.00	6.50	7.00	7.50	9.00	10.00	12.00	13.00
OVAL, GERMAN SILVER . . . . . EACH	10.50	11.50	12.50	13.00	16.00	18.00	21.00	23.00



S-306.
HARRIS SLOP SINK WITH BELL TRAP.



S-308.
SECTIONAL VIEW.

Size	Inches	12 x 12	14 x 14	16 x 16
Size of Outlet	Inches	2	2	2
Painted	Each	$2.00	$2.25	$2.50
Galvanized	Each	3.25	3.75	4.25
Enameled	Each	4.75	5.25	6.50



S-310.
SQUARE SLOP HOPPER.

DIMENSIONS—Diameter, 13 inches; depth, 7 inches; size of Outlet, 3 inches.

Price, ... Each, $3.50



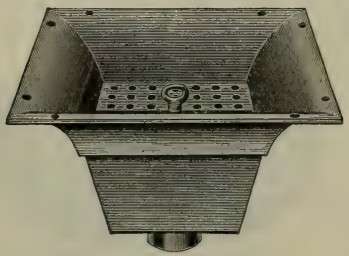
SLOP HOPPER
SECTIONAL VIEW.



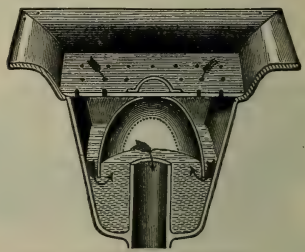
S-312.
ROUND SLOP HOPPER.

DIMENSIONS—Diameter, 13 inches; depth, 9 inches; size of Outlet, 3 inches.

Price, ... Each, $3.50



S-315. SEWER TRAP.



S-315. SECTIONAL VIEW.

S-315. SEWER TRAP.

DIMENSIONS—Top, 16 x 16 inches; depth, 10 inches; size of Outlet, 3 inches.

Painted, ... Each, $3.50

HOSPITAL WARD SINK.



S-327.

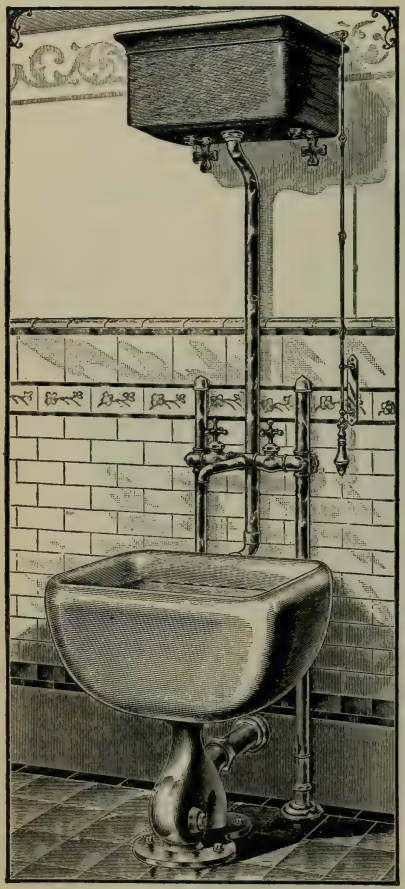
American Porcelain Hospital Ward Sink, with Flushing Rim and Porcelain Trap Standard, Hardwood finished Tank, N. P. Brass Combination Faucet with Pipes to Floor for Sink, N. P. Hot and Cold Water Valves and Supplies for Cleansing Jet.

	Class A	Class B	Class C
Price, as described,	$88.50	$71.50	$64.50

Pedal Valve to Cleansing Jet, instead of Supply Pipes, if preferred, at same price.

The Clow Hospital Ward Sink is a valuable, practical fixture for Hospital Wards, Operating Rooms, etc., and should be found in every well-appointed Hospital or Clinic. It disposes of fœcal and other waste matter neatly, quickly and completely When used in the Hospital Ward, contents of bed-pans are emptied into the right side of sink and the pan, inverted, is cleansed over the water jet, with cold or hot water supplied from the two valves over left of sink, or the water may be turned on by means of pedal, if the latter attachment be used In the operating room this Sink is an invaluable adjunct as receptacle for the contents of pus-basins and other refuse matter from the operating table. With the pedal attachment, basins may be instantly and thoroughly cleansed without the attendant's being obliged to touch aseptic faucets with the hands.

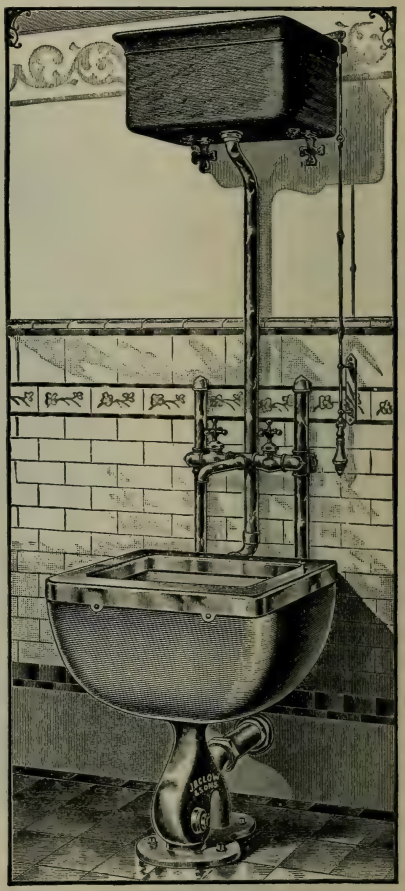
CLOW AMERICAN PORCELAIN SLOP SINKS.



S-330.

American Porcelain Flushing Rim Slop Sink, with Nickel Plated Strainer, Bronzed Iron Trap Standard, Oak Tank, Nickel Plated Wall Guide and Rod with Pull, Flush Pipe, Combination Faucet and Supply Pipes with Air Chambers.

Size, 22 x 22 x 12,	Class A.	Class B.	Class C.
Price, as described	$64.50	$57.00	$52.00
If with Porcelain Trap,	69.00	62.00	57.00
If with Nickel Plated Brass Trap,	81.50	74.00	69.00



S-332.

American Porcelain Slop Sink, with Nickel Plated Brass Flushing Rim, Nickel Plated Strainer, Bronzed Iron Trap Standard with Vent to Wall, Oak Tank, Nickel Plated Wall Guide and Rod with Pull, Flush Pipe, Combination Faucet and Supply Pipes with Air Chambers.

Size,	Class A.	Class B.	Class C.
22 x 18 x 12,	$71.00	$67.00	$65.00
24 x 20 x 12,	73.50	68.50	66.00
If with Nickel Plated Brass Trap, add			17.00

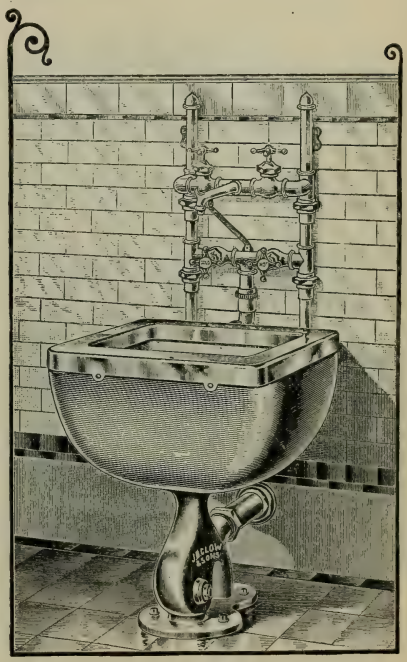
CLOW AMERICAN PORCELAIN SLOP SINKS.



S-336.

American Porcelain Flushing Rim Slop Sink, with Nickel Plated Strainer, Bronzed Iron Trap Standard with Vent to wall, Nickel Plated Combination Faucet and Flushing Rim Connection, Supply Pipes with Air Chambers.

Size, 22 x 22 x 12	Class A.	Class B.	Class C.
Price as described,	$58.50	$50.50	$45.50
If with Porcelain Trap,	63.50	55.50	50.50
If with N. P. Brass Trap,	75.50	67.50	62.50

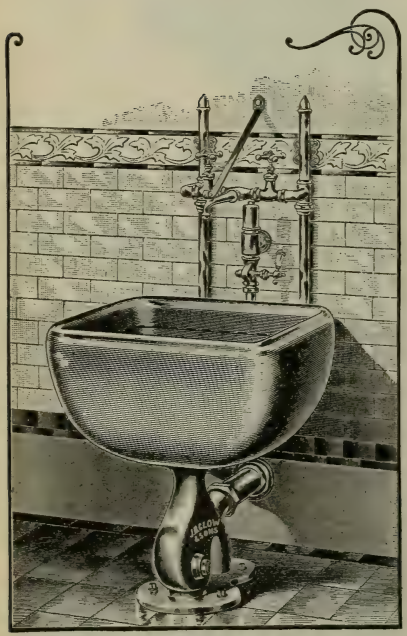


S-338.

American Porcelain Slop Sink, with Nickel Plated Brass Flushing Rim, Nickel Plated Strainer, Bronzed Iron Trap Standard with Vent to wall, Nickel Plated Combination Faucet and Flushing Rim Connection, Supply Pipes with Air Chambers.

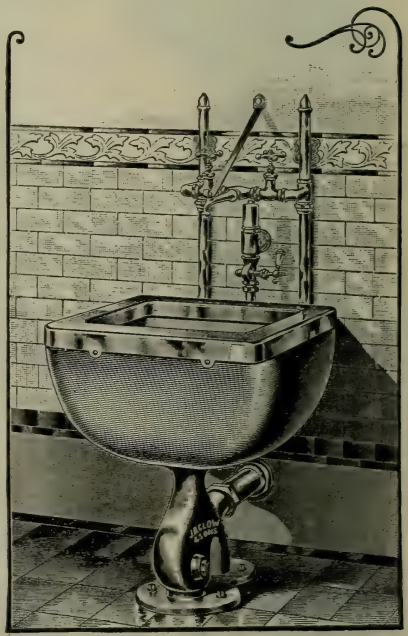
Size,	Class A.	Class B.	Class C.
22 x 18 x 12,	$65.00	$61.50	$58.50
24 x 20 x 12,	67.00	62.50	59.50
If with N. P. Brass Trap, add			17.00

CLOW AMERICAN PORCELAIN FLUSHOMETER SLOP SINKS



S-342.

American Porcelain Flushing Rim Slop Sink with Nickel Plated Strainer, Bronzed Iron Trap Standard with Vent to Wall, and Flushometer.



S-344.

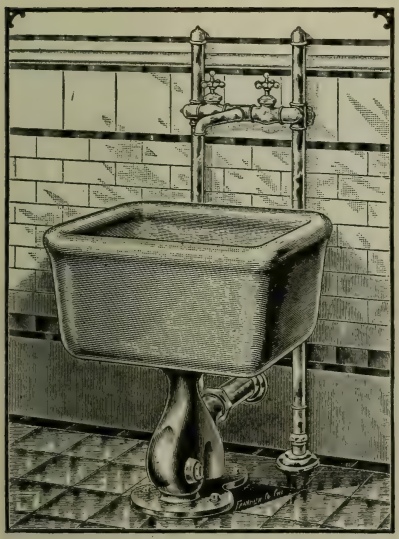
American Porcelain Slop Sink with N. P. Brass Flushing Rim, N. P. Strainer, Bronzed Iron Trap Standard with Vent to Wall, and Flushometer.

DIMENSIONS AND PRICES.

		Size.	Class A.	Class B.	Class C.
S-342.	Complete as described,	22 x 22 x 12	$74.00	$67.00	$60.00
S-344.	Complete as described,	22 x 18 x 12	79.50	76.00	73.50
"	" " "	24 x 20 x 12	84.50	80.00	77.50
If with Porcelain Trap without Vent, add			10.00	8.75	8.00
If with Nickel Plated Polished Brass Trap, add					25.00

For pressures under 10 pounds, or where Tank is from 2 to 20 feet above Sink, the No. 1 Flushometer should be specified; for pressures over 10 pounds, or where Tank is more than 20 feet above Sink, specify Flushometer No. 2. Supply should be 1¼ inches.

CLOW AMERICAN PORCELAIN SLOP SINKS.

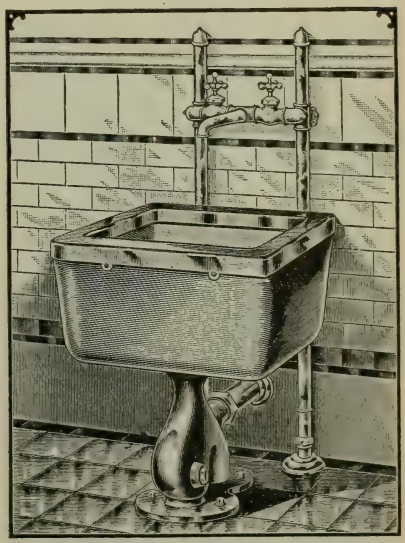


S-348.

American Porcelain Slop Sink with Nickel Plated Strainer, Bronzed Iron Trap Standard with Vent to wall, Nickel Plated Combination Faucet and Supply Pipes with Air Chambers.

DIMENSIONS AND PRICES.

Size.	Class A.	Class B.	Class C.
20 x 16 x 12 inches,	$36.00	$31.50	$29.00
22 x 18 x 12 inches,	40.50	35.00	31.50
24 x 20 x 12 inches,	45.00	38.50	34.00



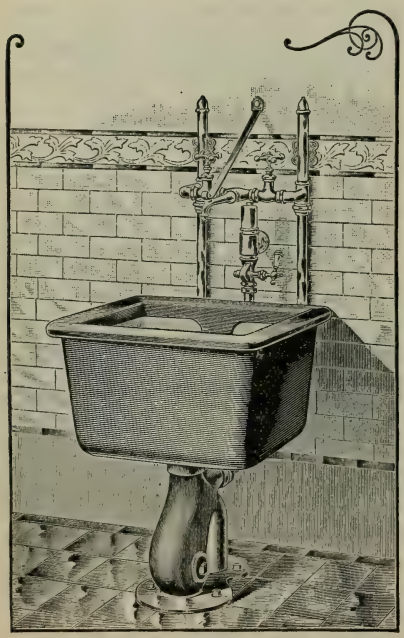
S-350.

American Porcelain Slop Sink with Nickel Plated Brass Rim, Nickel Plated Strainer, Bronzed Iron Trap Standard with Vent to wall, Nickel Plated Combination Faucet and Supply Pipes with Air Chambers.

DIMENSIONS AND PRICES.

Size.	Class A.	Class B.	Class C.
20 x 16 x 12 inches,	$55.00	$51.50	$49.50
22 x 18 x 12 inches,	57.00	53.50	51.00
24 x 20 x 12 inches,	59.50	55.50	52.50

CLOW ENAMELED IRON SLOP SINKS.

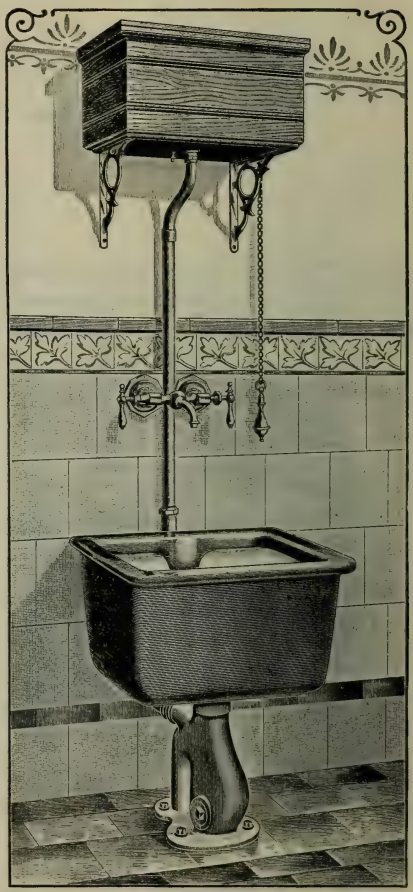


S-355.

Enameled Iron Slop Sink with Nickel Plated Brass Flushing Rim, Iron Trap Standard with Brass Vent, Flushometer, Nickel Plated Combination Faucet and Supply Pipes with Air Chambers.

DIMENSIONS AND PRICES.

Size of Sink, - - - Inches	16 x 20	18 x 22	20 x 24
Depth of Sink, - - Inches	12	12	12
Enameled Inside, - - -	$56.00	$59.00	$61.00
Enameled In and Out, -	61.00	64.50	67.00



S-357.

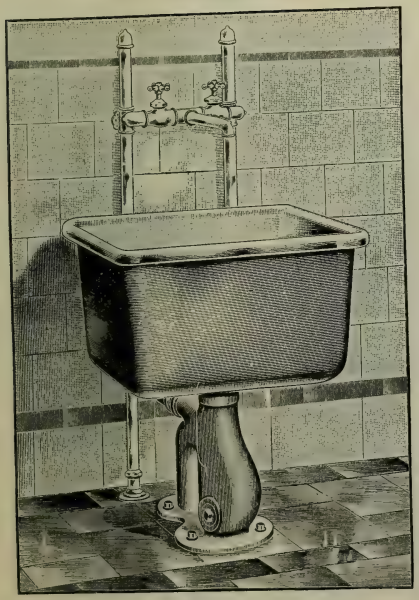
Enameled Iron Slop Sink with Nickel Plated Brass Flushing Rim, Iron Trap Standard with Brass Vent, Nickel Plated Fuller Combination Faucet, Flush Pipe with Slip Joint and Cherry or Oak Tank.

DIMENSIONS AND PRICES.

Size of Sink, - - - Inches	16 x 20	18 x 22	20 x 24
Depth of Sink, - - Inches	12	12	12
Enameled Inside, - - -	$44.00	$47.00	$49.00
Enameled In and Out, - -	49.00	52.50	55.00

S-357 Slop Sink can be furnished with Combination Faucet and Supplies with Air Chambers in front of wall, when so specified. Additional cost, $3.00.

CLOW ENAMELED IRON SLOP SINKS.

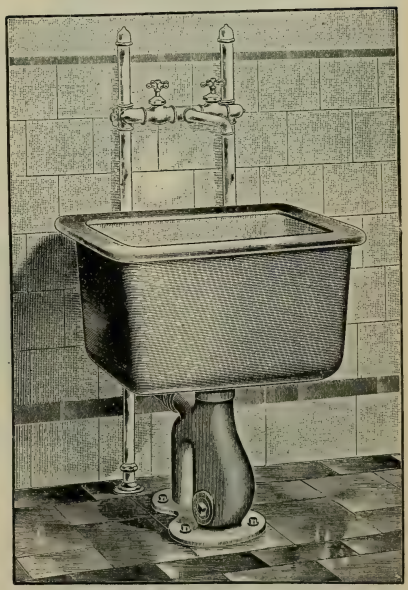


S-362.

Enameled Iron Rolled Rim Slop Sink, Iron Trap Standard with Brass Vent, Nickel Plated Combination Faucet and Supply Pipes with Air Chambers.

DIMENSIONS AND PRICES.

Size of Sink, - - - Inches	16 x 20	18 x 22	20 x 24
Depth of Sink, - - Inches	12	12	12
Enameled Inside, - - -	$26.50	$28.50	$30.50
Enameled In and Out - -	31.50	34.00	36.50



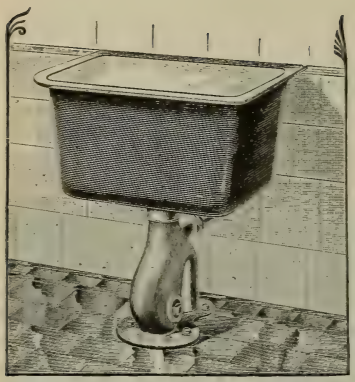
S-364.

Enameled Iron Slop Sink with Nickel Plated Brass Rim, Iron Trap Standard with Brass Vent, Nickel Plated Combination Faucet and Supply Pipes with Air Chambers.

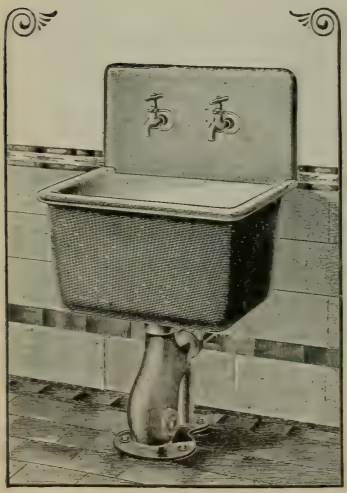
DIMENSIONS AND PRICES.

Size of Sink, - - - Inches	16 x 20	18 x 22	20 x 24
Depth of Sink, - - Inches	12	12	12
Enameled Inside, - - -	$30.00	$32.50	$35.00
Enameled In and Out - -	35.00	38.00	41.00

If with ⅜-inch Fuller Bibbs and Supplies with Air Chambers, deduct $1.50.



S-368.



S-371.

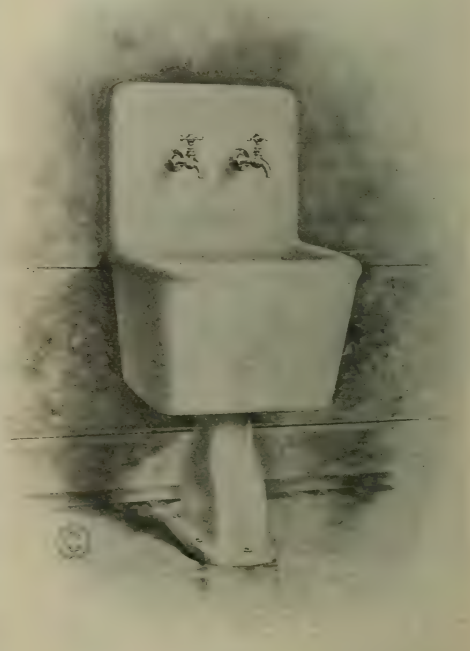
Enameled Iron Roll-rim Slop Sink on Trap Standard, with Brass Strainer and Vent Connection, Enameled Iron Back with Air Chambers, and Nickel Plated Boston Self-Closing Bibbs.

Size of Sink.	Price, as described, Enameled Inside,	Price, as described, Galvanized.
16x20x12 Inches,	$23.00	$21.00
18x22x12 Inches,	25.00	23.00
20x24x12 Inches,	27.00	25.00

CLOW SLOP SINKS.

S-368. Enameled Iron Slop Sink on Trap Standard, with Brass Strainer and Vent Connection.

Size of Sink, Inches	16x20x12	18x22x12	20x24x12
Enameled Inside,	$13.00	$14.50	$16.00
Galvanized,	12.00	13.50	15.00



S-373.

American Porcelain Roll-rim Slop Sink, with Back and Pedestal Trap, Nickel Plated Strainer and ¾-inch Nickel Plated Compression Bibbs with China Centers, Bolts and Washers.

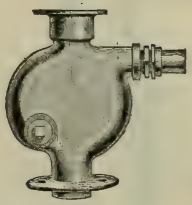
PRICES AND DIMENSIONS.

	Class A.	Class B.	Class C.
16x20x12 Inches,	$38.50	$29.50	$23.50
18x22x12 Inches,	43.50	33.50	26.50
20x24x12 Inches,	48.50	37.50	29.50



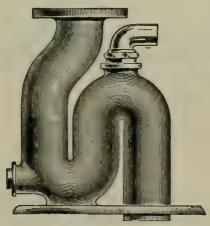
S-377.

Slop Sink Trap Standard, enameled inside, with offset outlet and brass vent connection. For enameled iron or porcelain slop sinks. Price, - - - - $7.50



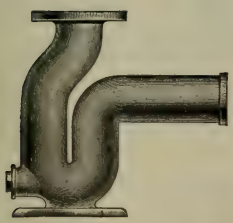
S-379.

Slop Sink Trap Standard, enameled inside, with straight outlet and vent connection. For enameled iron or porcelain slop sinks. Price, - - - - $7.00



S-381.

Slop Sink Trap Standard, enameled inside, with floor outlet and iron pipe vent. For enameled iron or porcelain slop sinks. Price, - - - - - $7 50



S-392.

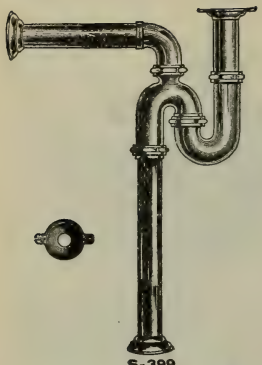
Slop Sink Trap Standard, enameled inside, with wall outlet to calk into soil pipe. For enameled iron or porcelain slop sinks. Price, - - - - - $7.50



S-394.

Slop Sink Trap Standard, enameled inside, with wall outlet threaded for iron pipe. For enameled iron or porcelain slop sinks. Price, - - - - $7.00

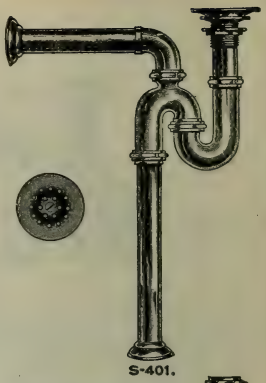
Any of the above Traps can be furnished enameled outside at additional cost.



S-399.

S-399. Clow Adjustable Cast Brass Sink Trap, vented, with Collar for Cast Iron or Steel Sinks, Nickel Plated or Finished Brass.

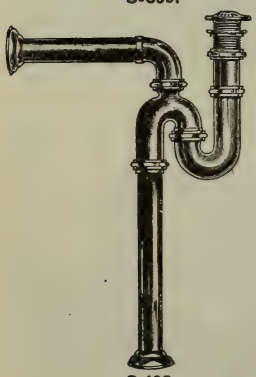
1½-inch	$ 7.00
2-inch	12.00



S-401.

S-401. Clow Adjustable Cast Brass Sink Trap, vented, with Strainer and Columbus Sink Connection. Nickel Plated or Finished Brass.

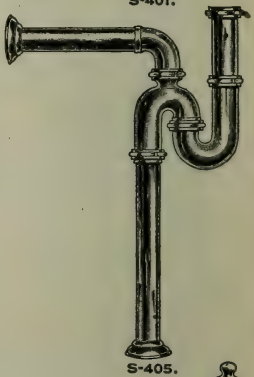
1½-inch	$ 7.50
2-inch	12.50



S-403.

S-403. Clow Adjustable Cast Brass Sink Trap, vented, with Strainer Grate for Porcelain or Slate Sinks. Nickel Plated or Finished Brass.

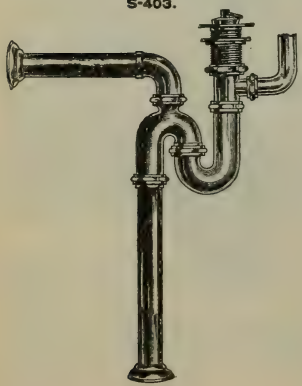
1½-inch	$ 7.50
2-inch	12.50



S-405.

S-405. Clow Adjustable Cast Brass Sink Trap, vented, with Slip Joint Connection for Ideal or Standing Waste. Nickel Plated or Finished Brass.

1½-inch	$ 7.00
2-inch	12.00



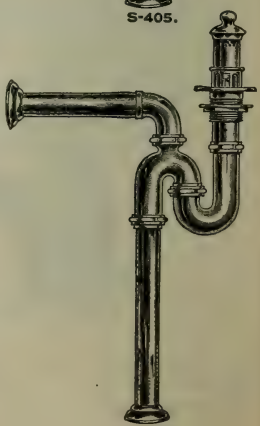
S-407.

S-407. Clow Adjustable Cast Brass Sink Trap, vented, with Plug and Slip Joint Connection for Overflow. Nickel Plated or Finished Brass.

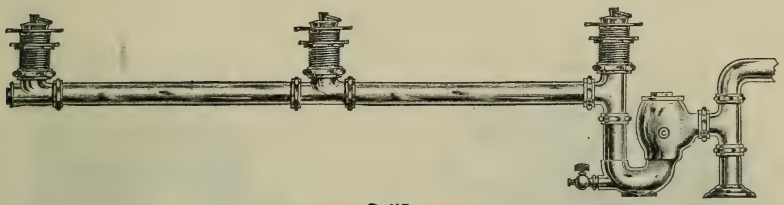
1½-inch	$ 8.00
2-inch	13.00

S-409. Clow Adjustable Cast Brass Sink Trap, vented, with Standing Waste and Overflow for Recessed Sinks. Nickel Plated or Finished Brass.

1½-inch	$12.00
2-inch	18.00

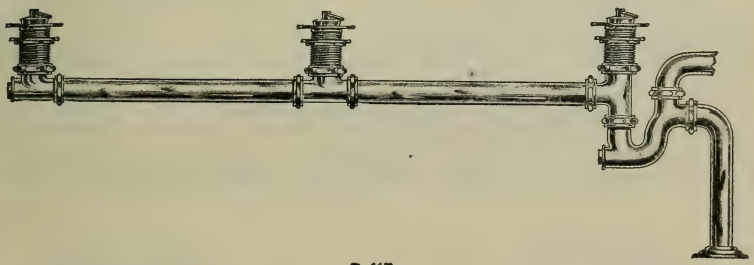


S-409.



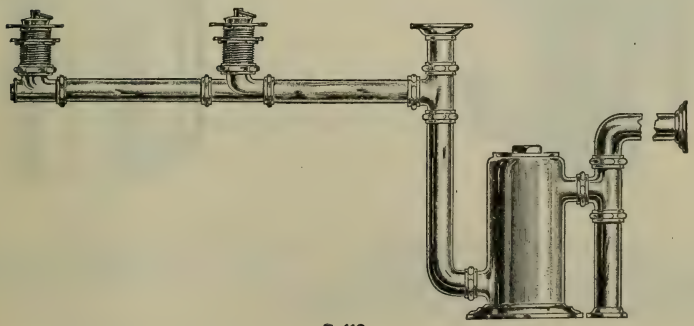
S-415.

Continuous Brass Waste for Laundry Tubs, complete with Plugs and Clow Special C Trap (Patented). Made for any number of Laundry Tubs. Prices upon application.



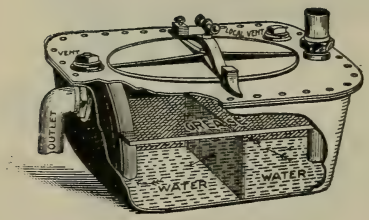
S-417.

Continuous Brass Waste for Laundry Tubs, complete with Plugs and Clow Adjustable Trap. Made for any number of Laundry Tubs. Prices upon application.

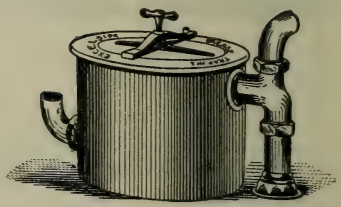


S-419.

Continuous Brass Waste for Combination Lavatory and Sink, with Clow Brass Grease Trap. Price upon application.



S-425. IRON GREASE TRAP.
NO. 1.



S-427. IRON GREASE TRAP.
NO. 2.

DESCRIPTION	Length	Height	Depth	Connection	Trimmings	Price Enameled Paint	Price Enameled Inside	Price, Enameled Inside and Out
S-425. NO. 1	18 inches	12 inches	10 inches	2 inches	Rough Brass	15.00	19.00	23.00
S-427. NO. 2	12 inches	8 inches	9 inches	1½ inches	Nickel Plated	12.00	14.00	17.00

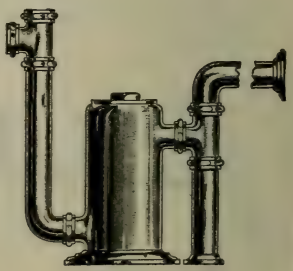
The No. 1 size is for use in Hospitals, Hotels and Restaurants, where large quantities of greasy water are being discharged. The No. 2 is made on the same principle but smaller, and is designed principally for use in private residences.



*S-430.

Nickel Plated or Polished Brass Sieben Grease Trap with Couplings, complete.

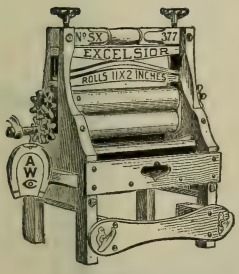
Size 6x10 inches	$12.00
Size 10x12 inches	18.00
Size 14x16 inches	23.00



S-432.

Nickel Plated or Polished Brass Clow Grease Trap with 2-inch Inlet and Outlet Couplings, size 5x10½ inches.
Price $16.00

*This Trap is fitted with a removable cylinder for emptying and cleaning.

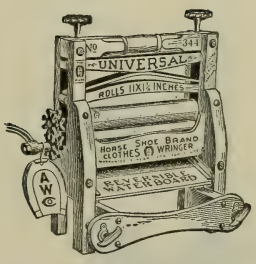


S-438.

Excelsior Wringer for Porcelain Tubs to fit Base, as shown in S-5 and S-6.

Number 1. Size of Rolls, 11 x 2 inches.
Price, - - - - - - - - - - $6.75

Number 2. Size of Rolls, 12 x 2 inches.
Price, - - - - - - - - - - 7.50

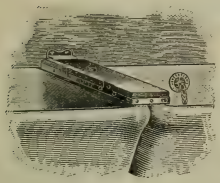


S-440.

Universal Wringer for Marble, Slate or Soap Stone Laundry Tubs. Can also be used on Porcelain Tubs when the Clow Special C Wringer Base, as shown in S-1 and S-7, is used.

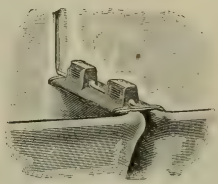
Number 1. Size of Rolls, 11 x 1⅞ inches.
Price, - - - - - - - - - - $5.00

Number 2. Size of Rolls, 12 x 1⅞ inches.
Price, - - - - - - - - - - 6.00



S-442.

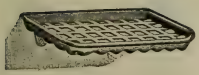
Hardwood Wringer Attachment for Porcelain Laundry Tubs, with Nickel Plated mountings. Each, - $5.00



S-444.

Clow Special C Wringer Base, Galvanized Iron, for Porcelain Laundry Tubs. Each, - - - - $5.00

These Wringer Bases are sold only in combination with Laundry Tubs.



S-445.

Galvanized Iron Soap Dish for Laundry Tubs. Each, - - - $0.50

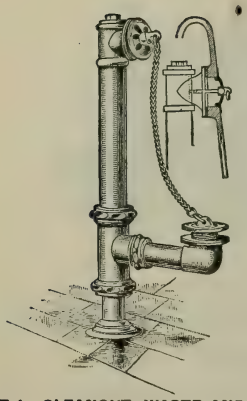


S-446.

Hardwood Covers for Laundry Tubs made to order for any number or style of Tub. Prices upon application.

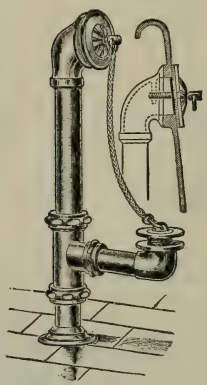
BATH TUB WASTES.

NICKEL PLATED.



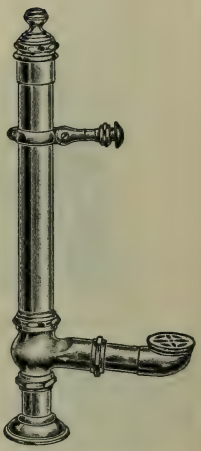
T-1. CLEANOUT, WASTE AND OVERFLOW.

1½-inch - - - - - each, 5.50
2-inch - - - - - each, 7.00



T-3. COMBINED WASTE AND OVERFLOW.

1½-inch - - - - - each, 3.50

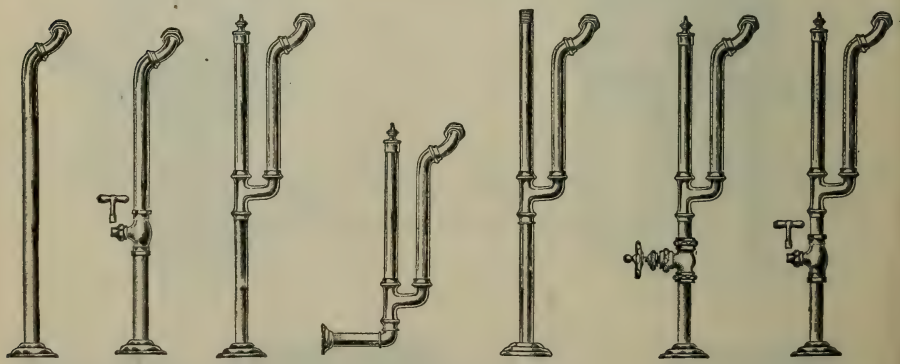


T-5. IDEAL BATH WASTE.

All Nickel Plated - - each, 10.00
With China Center - - each, 11.00
With China Knob - - each, 12.00

BATH TUB SUPPLY PIPES.

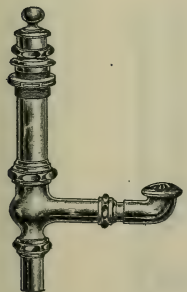
MADE FROM ½-INCH IRON PIPE SIZE BRASS PIPE.



T-14. T-16. T-20. *T-22. †T-24. T-26. T-28.

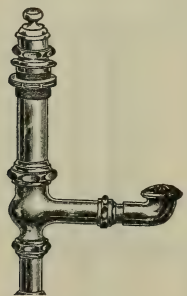
FIGURE	T-14	T-16	T-20	T-22	T-24	T-26	T-28
NICKEL PLATED PER PAIR	4.00	4.50	7.00	7.50	8.00	8.50	10.00

*T-22, Bath Supply to wall. †T-24, Bath Supply with Shower Attachment.



T-32.

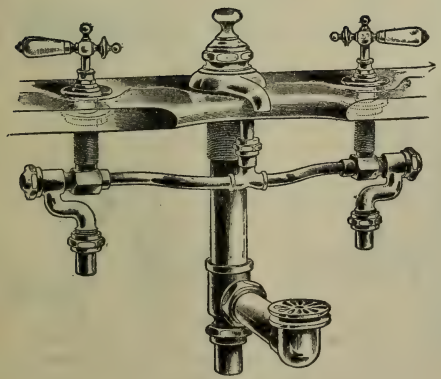
Ideal Basin Waste. Nickel Plated . . Each, $6.00
With China Centers . . . . . Each, 7.00



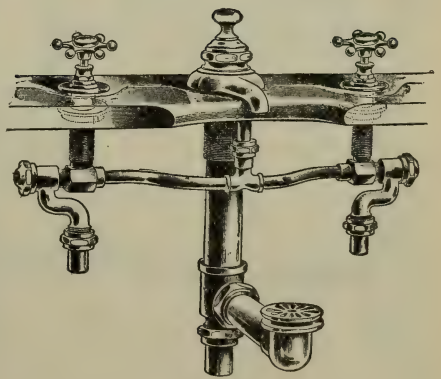
T-33.

Ideal Basin Waste. Nickel Plated, with China Knobs.
Each $8.00

If for Solid Porcelain Lavatories, add to list $2.00



T-35.

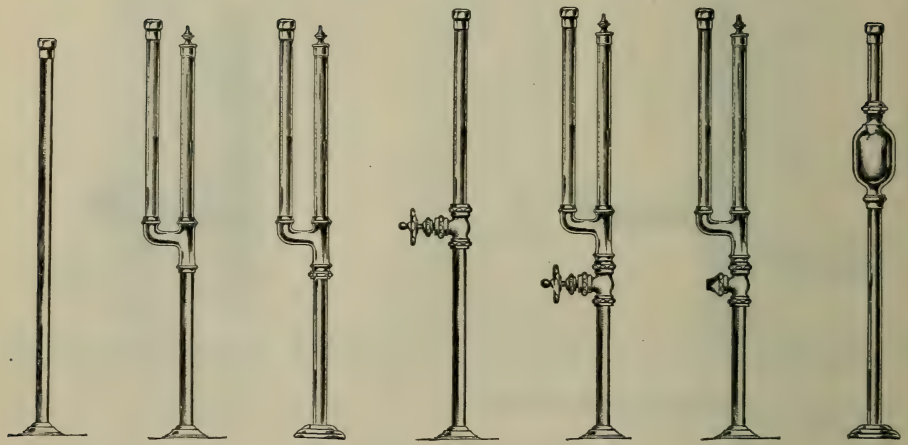


T-36.

The Corinthian Lavatory Supply and Waste Connections as shown are sold only with complete Lavatories. Figure T-35 has Fuller Supply Valves. Figure T-36 has Compression Valves.

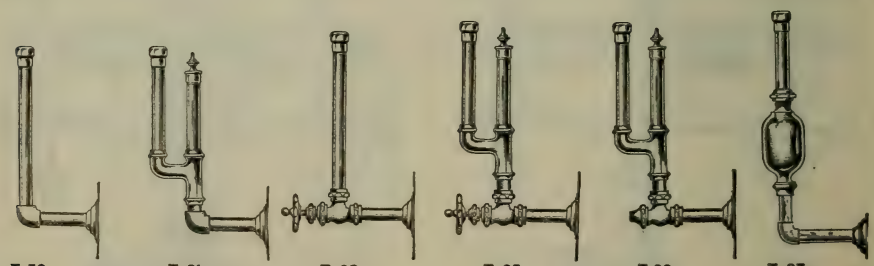
LAVATORY SUPPLY PIPES.

MADE FROM IRON PIPE SIZE BRASS TUBING.



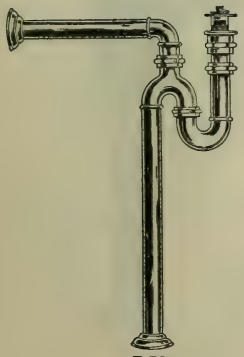
T-43. T-46. T-49. T-51. T-53. T-55. T-56.

FIGURE	T-43	T-46	T-49	T-51	T-53	T-55	T-56
NICKEL PLATED, ⅜-INCH . . . PER PAIR	2.50	4.50	5.25	5.50	7.00	7.50	7.50
NICKEL PLATED, ½-INCH . . . PER PAIR	3.25	5.60	6.35	6.75	9.00	9.50	9.00



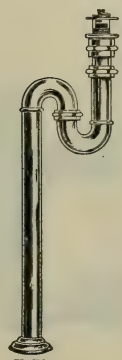
T-59. T-61. T-63. T-65. T-66. T-67.

FIGURE	T-59	T-61	T-63	T-65	T-66	T-67
NICKEL PLATED, ⅜-INCH . . . . . PER PAIR	2.75	4.00	4.75	7.00	7.50	8.00
NICKEL PLATED, ½-INCH . . . . . PER PAIR	3.75	6.25	6.50	8 50	8.75	9.00



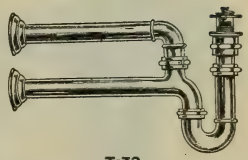
T-70.

Nickel Plated S Trap with vent, 1¼-inch - - - each, $5.00



T-71.

Nickel Plated S Trap, without vent, 1¼-inch - - each, $4.50



T-73.

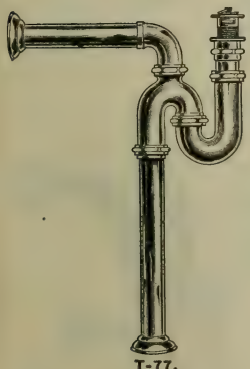
Nickel Plated P Trap with vent, 1¼-inch - - - each, $5.00



T-74.

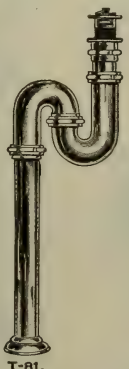
Nickel Plated P Trap, without vent, 1¼-inch - - each, $4.50

Above Traps will be sent as shown, with P. O. Plugs, unless otherwise specified. If with 1½-inch P. O. Plug, add to list $1.00.



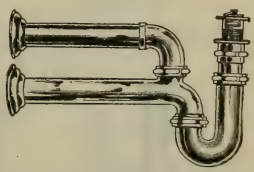
T-77.

Nickel Plated Clow S Trap with vent, 1½-inch - - each, $7.00



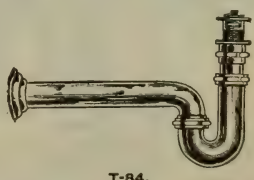
T-81.

Nickel Plated Clow S Trap without vent, 1½-inch - - each, $6.50



T-83.

Nickel Plated Clow P Trap with vent, 1½-inch - - each, $7.00



T-84.

Nickel Plated Clow P Trap without vent, 1½-inch - each, $6.50

Polished Brass Traps same price as Nickel Plated.

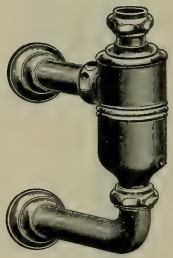


T-89.

Clow Anti-Siphon Sanitary Trap. Polished brass or nickel plated.

1½-inch, ... $10.00

This Trap requires no Vent.



T-92.

Nickel plated Colonial Trap to wall, with Vent.

1½-inch, ... $6.50

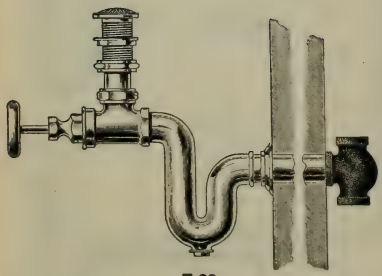


T-96.

Nickel plated Colonial Trap to floor, with Vent.

1½-inch, ... $6.50

If without Vent, . . . 6.00



T-99.

Asylum Lavatory Brass Trap, with quick opening Waste Valve and Vent Fitting, nickel plated.

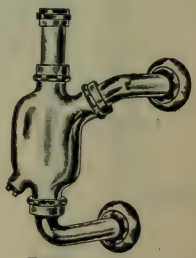
1½-inch, ... $12.00

If without Vent Fitting, deduct 1.00



T-101.

Nickel plated Eclipse Trap, with Vent. 1½-inch, . . $6.00

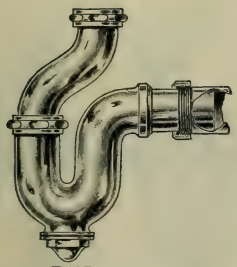


T-102.

Nickel plated Eclipse Trap to wall. 1½-inch, . . $6.00

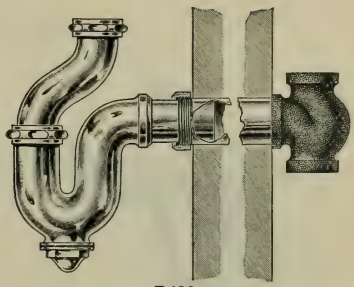
Traps will be sent as shown without Patent Overflow Plugs unless otherwise ordered.

For 1½ and 2-inch Sink Traps see page 746.



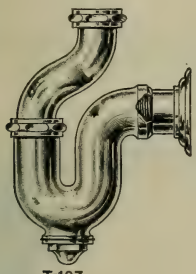
T-105.

Clow Adjustable Offset Brass Trap with Slip Joint Connection, Nickel Plated or Finished Brass.
1½-inch, - - - - - - - - - - - - $6.50



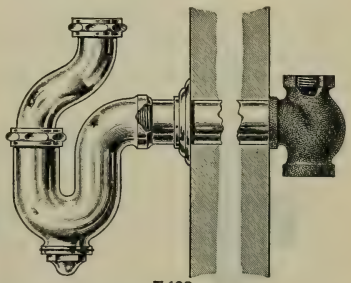
T-106.

Clow Adjustable Offset Brass Trap with Slip Joint Connection, showing connection to vent fitting.
See page 756 for price on Vent Fittings.



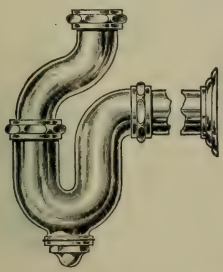
T-107.

Clow Adjustable Offset Brass Trap for Iron Pipe, Nickel Plated or Finished Brass.
1½-inch, - - - - - - - - - - - - $6.50
This trap requires a piece of brass pipe to connect with vent fitting, made in any length required at additional cost.



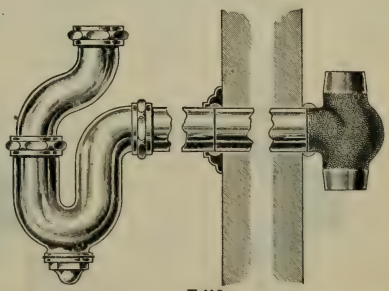
T-108.

Clow Adjustable Offset Brass Trap for Iron Pipe, showing connection to vent fitting.
See page 756 for price on Vent Fittings



T-109.

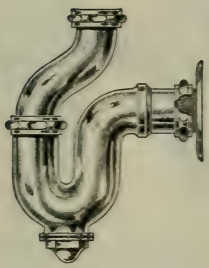
Clow Adjustable Offset Brass Trap for lead waste connection, Nickel Plated or Finished Brass.
1½-inch, - - - - - - - - - - - - $6.50



T-110.

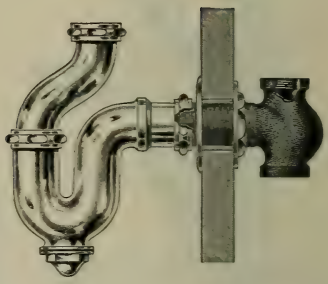
Clow Adjustable Offset Brass Trap for lead waste connection, showing connection to vent fitting.
For price on Vent Fittings see page 756.

Patent Overflow Plugs for any of the above traps, add $0.50.
For 1½ and 2-inch Sink Traps see page 746.



T-116.

CLOW
SPECIAL



T-117.

Clow Adjustable Offset Trap with coupling nut to connect to long thread vent fitting, complete with rough brass vent fitting.
Nickel Plated or Finished Brass, 1½ inch, . $8.00

Showing application of Clow Adjustable Offset Trap for marble partition or wainscoting.



T-118.

Clow Brass Vent Fitting for iron pipe,
1¼-inch, ... $1.35
1½-inch, ... 1.65
2-inch, ... 2.50



T-119.

Clow Brass Vent Fitting for iron and lead pipe, 1¼-inch, . . $1.35
1½-inch, ... 1.65
2-inch, ... 2.50



T-120.

Clow Brass Vent Fitting for lead pipe,
1¼-inch, ... $1.25
1½-inch, ... 1.50
2-inch, ... 2.25



T-122.

Standard Brass Vent Fitting for iron pipe, 1¼-inch, . . . $1.25
1½-inch, ... 1.50
2-inch, ... 2.25



T-123.

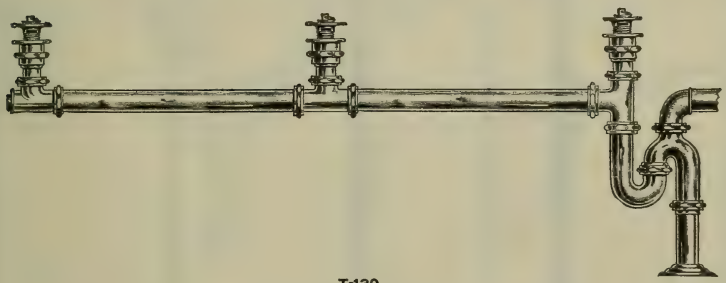
Standard Brass Vent Fitting for lead and iron pipe, 1¼-inch, . $1.25
1½-inch, ... 1.50
2-inch, ... 2.25



T-124.

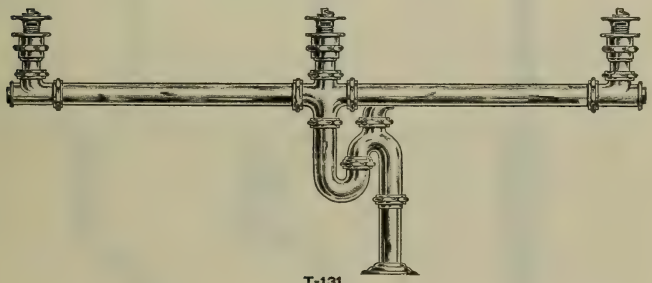
Standard Brass Vent Fitting for lead pipe, 1¼-inch, . . . $1.15
1½-inch, ... 1.35
2-inch, ... 2.00

CLOW CONTINUOUS WASTES.



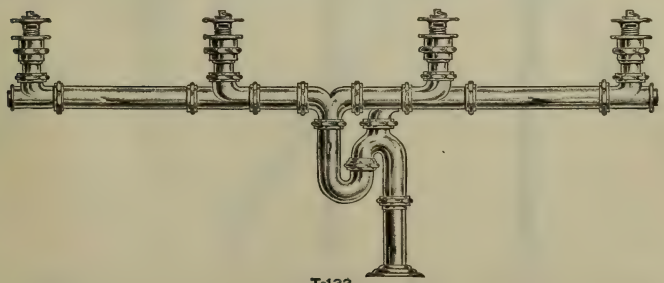
T-130.

N. P. Brass Continuous Lavatory Waste with three Plugs and S-Trap at end.



T-131.

N. P. Brass Continuous Lavatory Waste with three Plugs and S-Trap in center.



T-132.

N. P. Brass Continuous Lavatory Waste with four Plugs and S-Trap in center.

These Continuous Wastes can be made for any number of basins. Special prices upon application.

BRASS LAVATORY LEGS.


T-136.


T-137.


T-138.


T-140.


T-141.


T-143.


T-144.


T-145.


T-147.

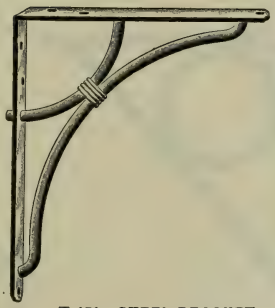

T-148.

FIGURE	T-136	T-137	T-138	T-140	T-141	T-143	T-144	T-145	T-147	T-148
NICKEL PLATED EACH	5.25	2.50	4.00	3.50	5.00	3.50	4.00	3.50	5.00	6.00

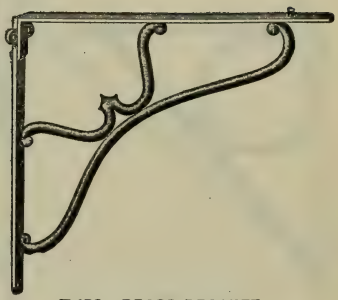
All Legs 28¼ inches high.



T-150. IRON SINK BRACKET.



T-151. STEEL BRACKET.



T-153. BRASS BRACKET.

IRON BRACKETS.—T-150.

NUMBER	1 (15 x 16 inches)	2 (16 x 18 inches)	3 (15 x 20 inches)
PAINTED EACH	.36	.46	.65
GALVANIZED EACH	.54	.65	.90
ENAMELED EACH	.95	1.00	1.40

NICKEL PLATED STEEL AND BRASS BRACKETS.—T-151 and T-153.

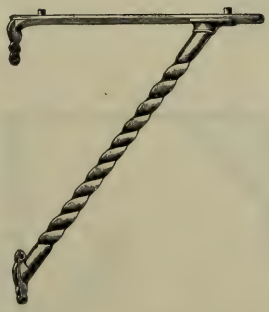
SIZE INCHES	4 x 5	7 x 9	8 x 10	9 x 11	12 x 16	16 x 18	20 x 29
T-151. STEEL EACH	.15	.30	.55	.60	.90	.90	2.60
T-153. BRASS EACH	.90	1.50	1.75	1.85	----	2.80	----



T-155.

Twisted Steel Bracket, nickel plated, size 16 x 18 inches.

Each, ...80



T-156.

Nickel plated Brass Bracket, size 18 x 20 inches.

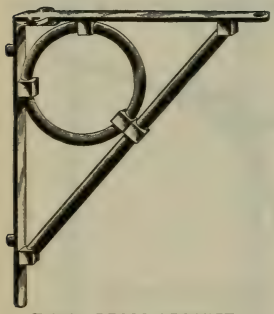
Each, ... 3.50



T-158.

Heavy Bracket for Two-Bowl Lavatories, size 20 x 20 inches.

Brass, nickel plated, . each 4.50
Iron, electro bronze plated, each 4.00



T-160. BRASS BRACKET.



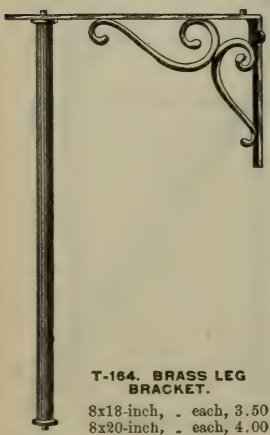
T-161. BRASS BRACKET.



T-163. BRASS BRACKET.

BRASS BRACKETS, NICKEL PLATED.

SIZE . . . . . INCHES	7x9	8x10	9x11	16x18	20x20
T-160. NICKEL PLATED . . . . . EACH	2.50	2.75	3.00	4.50	9.00
T-161. NICKEL PLATED . . . . . EACH	2.75	3.25	3.50	5.00	9.50
T-163. NICKEL PLATED . . . . . EACH	----	----	----	6.50	----

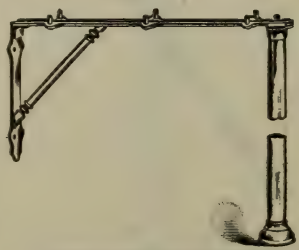


T-164. BRASS LEG BRACKET.

8x18-inch, . each, 3.50
8x20-inch, . each, 4.00

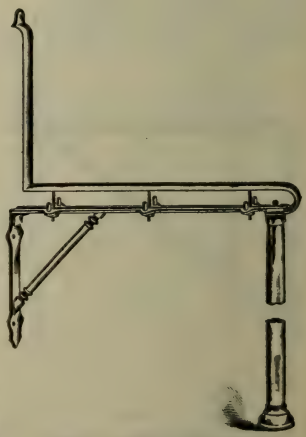
This list does not include leg. Order style leg wanted, see page 758.

Leg as shown, each, ... 2.75



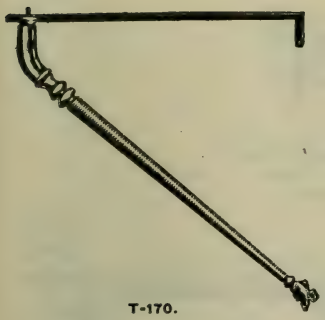
T-166. END LEG BRACKET.

For long marble or slate lavatory.



T-165. CENTER LEG BRACKET.

For long marble or slate lavatories, Sold only with complete fixture.



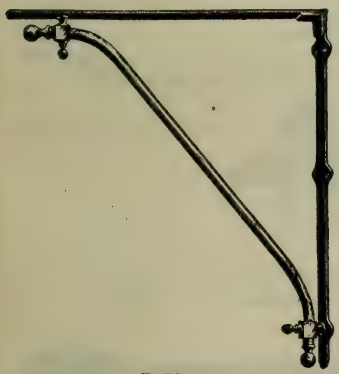
T-170.

Nickel Plated Brass Bracket.
Size, 18 x 20, ... Each, $6.75



T-171.

Nickel Plated Brass Bracket.
Size, 18 x 20, ... Each, $6.50



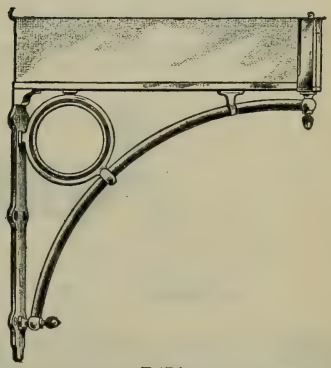
T-172.

Nickel Plated Brass Bracket.
Size, 18 x 20, ... Each, $4.50



T-173.

Brass Angle, with projecting pin to hold Marble to wall.
Each, . . . $0.30



T-174.

Brass Bracket.

Size, . . Inches,	20 x 21½	20 x 23½
For 5-inch Apron, Each,	$9.00	$10.00
Without Apron Attachment, . . Each,	8.50	9.00



T-175.

Apron Support.
Each, ... $1.25



T-177.

Nickel Plated Clamp.
To hold Marble Back to wall. Each, $0.40
If for Porcelain Backs, . . Each, 1.00



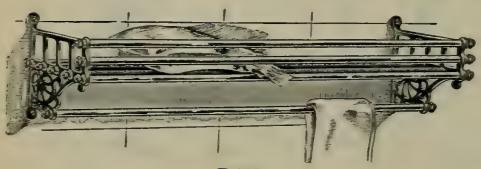
T-179.

Nickel Plated Clamp.
Clover Leaf Pattern, to hold Marble Back to wall.
Each, ... $0.50



T-183.

White Marble Shelf with Nickel Plated Brass Rail and Brackets.
24 inches long . $15.00; 36 inches . $22.50; 40 inches . $25.00
Plate Glass Shelf can be furnished at same price.



T-185.

Nickel Plated Towel Shelf and Rack.
20 inches long $5.50
Other lengths furnished to order.



T-186.

Plate Glass Shelf with Nickel Plated Brackets and Bar.
Length 24 inches $7.00
30 inches 8.00



T-187.

Nickel Plated Towel Shelf.
20 inches long . $3.50; 30 inches . $5.25; 36 inches . $6.50



T-189.

Glass Towel Rack with Nickel Plated Standards.
24 inches long $6.00
30 inches 7.00
36 inches 8.00
If White Porcelain Bar and Balls, add . . . 1.50



T-190.

Glass Towel Rack with Cut Glass Ends, Nickel Plated Standards.
30 inches long $7.50
36 inches 8.50



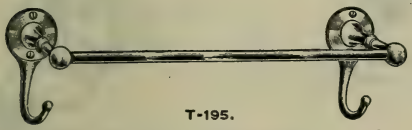
T-191.

Glass Towel Rack with Nickel Plated Standards.
24 inches long . . . $3.25; 30 inches . . . $3.75



T-193.

Nickel Plated Towel Rack, length, 20 inches, - - - $2.25
30 inches, - $3.50 36 inches, - $4.50



T-195.

Nickel Plated Towel Rack, length, 21 inches, - $2.25



T-196

Nickel Plated Towel Rack, length, 18 inches, - $1.25



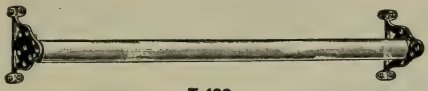
T-197.

Nickel Plated Towel Rack, length, 18 inches, - $0.90



T-198.

Nickel Plated Towel Rack, length, 18 inches, - $1.00



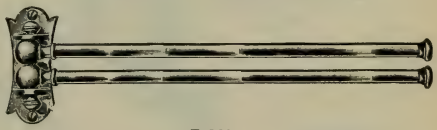
T-199.

Nickel Plated Roller Towel Rack, 1-inch bar, 18 inches long, - $2.25



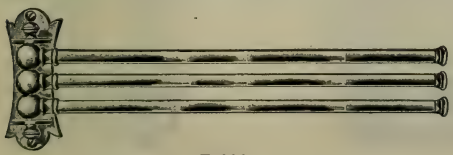
T-200.

Nickel Plated Single Bar Swinging Towel Rack, - $1.75



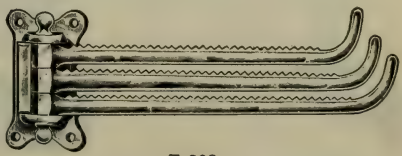
T-201.

Nickel Plated Double Bar Swinging Towel Rack, - $2.75



T-202.

Nickel Plated Triple Bar Swinging Towel Rack, - $3.75



T-203.

Nickel Plated Swinging Towel Rack for Railroad and Marine use, - - - - - - $5.00

Screws are included with all Fixtures.



T-207.
Tumbler Holder with etched glass tumbler. Nickel plated, $2.00



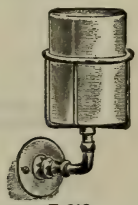
T-208.
Tooth Brush Holder with china cup. Nickel plated, . $2.25



T-209.
N. P. Carafe Holder with cut glass carafe, $6.50



T-211.
Tumbler Holder with glass tumbler. Nickel plated, . $1.25



T-212.
Tooth Brush Holder with china cup. Nickel plated, . $2.00



T-213.
Holder with china mug. Nickel plated, . $2.00



T-215.
Holder with china mug. Nickel plated, . . $2.75



T-216.
Tooth Brush Holder with china cup. Nickel plated, . $2.50



T-217.
Tumbler Holder with glass tumbler. Nickel plated, . $2.50



T-220.
Tooth Brush Holder.
Nickel plated, . $2.00



T-221.
Tooth Brush Tray.
Nickel plated, . . $2.00



T-222.
Nail Brush Holder.
Nickel plated, . $2.00

Screws are included with all fixtures.



T-226.

China Soap Dish, with Nickel Plated Holder, - - - - $2.00



T-228.

China Soap Dish, with Nickel Plated Holder, - - - - $2.75



T-230.

China Soap Dish, with Nickel Plated Holder, - - - - $2.75



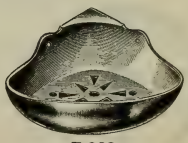
T-234.

Nickel Plated Soap Dish, with Removable Tray, - - - $1.85



T-236.

China Soap Dish, with Nickel Plated Holder, - - - - $2.00



T-238.

Nickel Plated Corner Soap Dish, $3.00



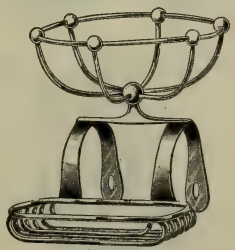
T-240.

Nickel Plated Soap Dish, Shell Pattern, - - - - - - $1.25



T-242.

Rubber Soap Dish, - - $0.30



T-246.

Combined Soap and Sponge Holder, Nickel Plated, - - $4.00



T-244.

Nickel Plated Soap Dish, to attach to Rim of Bath.

For 3-inch Rim, - - $2.00
For 4-inch Rim, - - 2.50



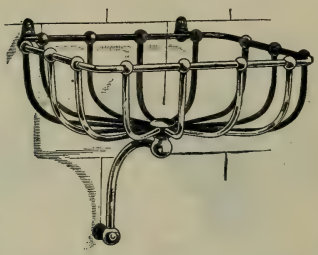
T-248.

Soap Dish, to attach to Rim of Bath Tub.

Nickel Plated, - - $0.75



T-250.
Nickel Plated Oval Holder, for small sponges, - - - - - $2.00



T-251.
Nickel Plated Brass Sponge Holder, - - - - - - - $5.50



T-252.
Nickel Plated Sponge Holder, $2.25



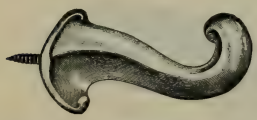
T-254.
Nickel Plated Towel Clip, $0.25



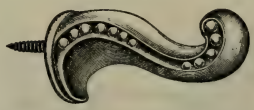
T-255.
Nickel Plated Comb and Brush Tray, - - - - - - - $2.75



T-257.
Nickel Plated Comb and Brush Tray, - - - - - - - $4.25



T-259.
China Bath Room Hook, - $0.25



T-260.
China Bath Room Hook, - $0.25



T-261.
China Bath Room Hook, - $0.25



T-262.
Nickel Plated Hat and Coat Hook, $1.25



T-269.
Single Hook, to bolt to marble. Nickel plated brass, $2.50



***T-271**
Double Hook, to bolt to marble. Nickel plated brass, $3.50

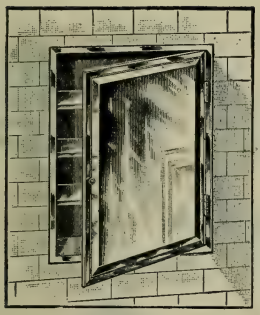


T-272.
Nickel Plated Double Robe Hook, $1.00



T-273.
Nickel Plated Robe Hook, - $0.30

*Made for ½ or 1 inch partitions.



T-275.

Beveled Plate Glass Mirror Medicine Case, Glass Shelves and Nickel Plated Frame, to set in recess of wall, $30.00



T-277.

Bath Seat with Nickel Plated Brass Supports, rubber capped to protect rim. Finished in Oak - $2.50
Celluloid - - - - - - - 6.50



T-279.

Bath Tub Hand Rail, 22 inches long, diameter of Rail 1 inch - - $4.00



T-281.

Bath Thermometer - - $0.80



T-283.

Bath Thermometer with Nickel Plated Brass Rod Guard, Marked Scale for warm, tepid, cold or freezing bath - - - - $3.50



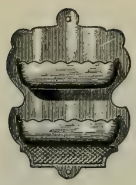
T-285.

Nickel Plated Brass Basket for soiled towels - - - $13.50
20 inches high, 12 inches in diameter.



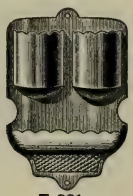
T-287.

Bath Room Scale, White Enameled, Cork Mat on Platform - - $42.00
If with Measuring Rod Attachment, add - - - - 8.50



T-289.

Match Box, Nickel Plated, . $2.00



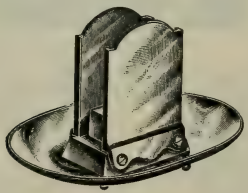
T-291.

Match Box, Nickel Plated, . $1.75



T-293.

Match Box Holder, Nickel Plated, $2.00



T-295.

Match Box Holder, Nickel Plated or Bronze, . $2.50



T-297.

Match Box Bronze Holder, ... $2.50



T-299.

Ash Tray and Cigar Rest, Cast Bronze, . . $1.50



T-301.

Ash Tray and Cigar Rest, Cast Bronze, . . $1.75



T-303.

Nickel Plated Whisk Broom Holder.
$1.00



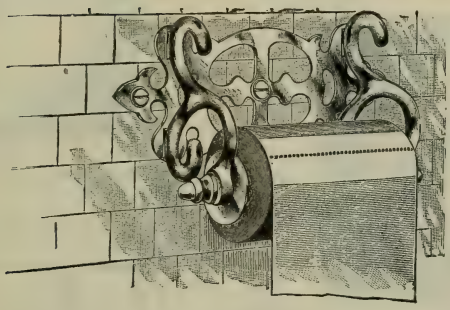
T-305.

Candle Stick, Finished Brass.
$1.25



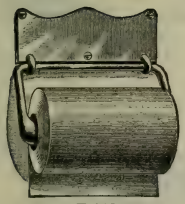
T-307.

Soda Bottle Holder, Nickel Plated.
$1.25



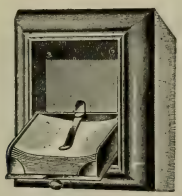
T-311.

Paper Holder, Nickel Plated $5.00



T-313.

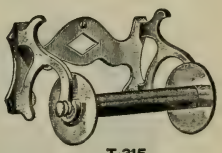
Paper Holder, Nickel Plated, $1.25



T-317

Folding Paper Holder, size over all $8\frac{3}{8}$x$10\frac{1}{4}$ inches, Nickel Plated, $7.50

The fixture is not intended to be recessed into the wall, but may be hung in any position.



T-315.

Paper Holder, Nickel Plated, $1.75



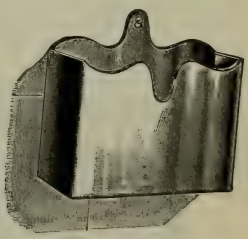
T-318.

Paper Holder for oval paper rolls, Nickel Plated $1.00



T-321.

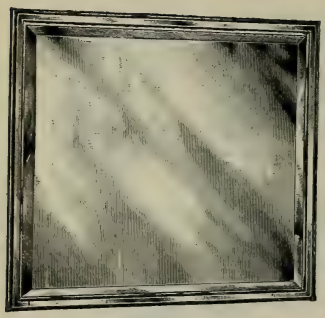
Cigar Holder for closet stalls, Nickel Plated $0.75



T-319.

Paper Holder for loose sheets, Nickel Plated $2.50

Screws are included with all fixtures.



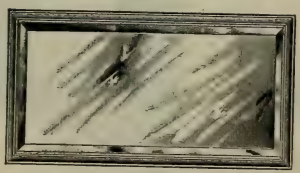
T-325.

Beveled Plate Glass Mirror with Nickel Plated Brass Frame, 33x30 - - - - - - - - $28.00
60x24 - - - - - - - - - 45.00
Width of Frame, 1¾ inches.



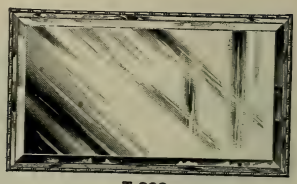
T-327.

Beveled Plate Glass Round Mirror with Wood Frame finished in White Enamel, Diameter 30 inches, $27.00



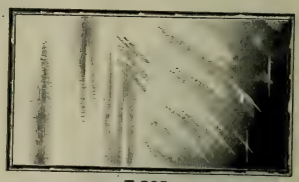
T-329.

Beveled Plate Glass Mirror with Wood Frame finished in White Enamel, 30x18 - - - - - - $12.00
33x18 - - - - - - - - - 13.00



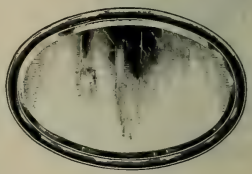
T-333.

Beveled Plate Glass Mirror with Nickel Plated Brass Frame, 33x18 - - - - - - - $20.00
33x30 - - - - - - - - - 28.00
Width of Frame, 1 inch.



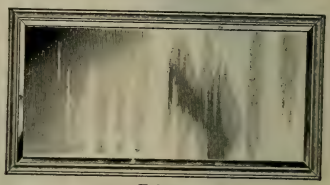
T-335.

Plate Glass Mirror with Nickel Plated Brass Frame, 24x18 - - - - - - - - $10.00
30x18 - - - - - - - - - 12.00
Width of Frame, ¾ inch.



T-337.

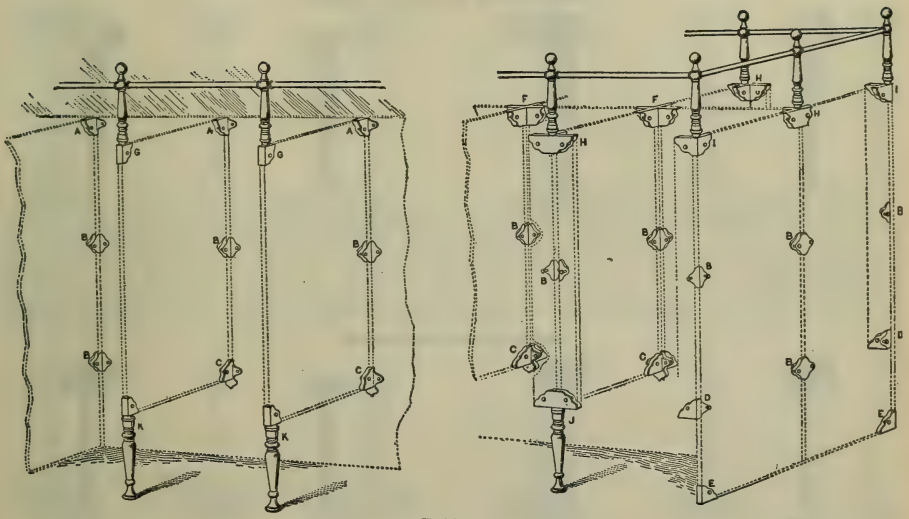
Beveled Plate Glass Mirror with Wood Frame finished in White Enamel, 24x18 - - - - - - $16.00
30x18 - - - - - - - - - 17.00
If with Nickel Plated Brass Frame, 24x33 - 25.00



T-339.

Beveled Plate Glass Mirror with Wood Frame finished in White Enamel, 33x30 - - - - - $22.00
33x18 - - - - - - - - - 14.00

CLOW STALL TRIMMINGS.

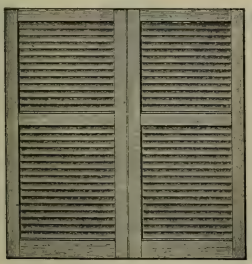


T-385.

The above illustrations demonstrate uses of some of the Clow Stall Trimmings, listed on pages 772 to 777. Figure numbers for the various Trimmings may be found below:

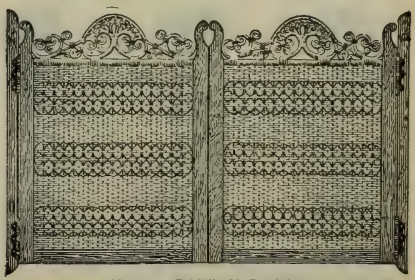
A = T-464
B = T-471.
C = T-465.
D = T-460 and T-461.
E = T-462 and T-463.
F = T-433 without Rail Support.
G is not shown elsewhere.
H = T-430.
I = T-431 and T-432.
J = T-409.
K = T-415.

Trimmings to meet any requirement, made to order.
In ordering Trimmings, state thickness of Marble or Slate.



T-390. SLATTED DOOR.

Prices upon application.



T-393. RATTAN DOOR.

T-393. In Measuring for Doors, give extreme width from jamb to jamb, or the space to be occupied; the height required; the width of woodwork or hanging stile necessary to be attached to each door, to permit its swinging clear; state if single or double doors are required (if single, state whether hinges are on right or left) Hinges and all necessary attachments furnished with doors.

ADJUSTABLE LEGS FOR WOOD.



T-401. FRONT.



T-402. CORNER.



T-403. CROSS.



T-404. RUNNING.

FIGURE	T-401	T-402	T-403	T-404
POLISHED BRASS EACH	4.00	3.75	4.25	3.50
NICKEL PLATED EACH	4.50	4.25	4.75	4.00

PLAIN LEGS FOR WOOD.



T-405. FRONT.



T-406. CORNER.



T-407. CROSS.



T-408. RUNNING.

FIGURE	T-405	T-406	T-407	T-408
POLISHED BRASS EACH	3.50	3.25	3.25	3.00
NICKEL PLATED EACH	4.00	3.75	4.75	3.50

ADJUSTABLE LEGS FOR MARBLE OR SLATE.



T-409. FRONT.



T-410. L. H. CORNER.



T-411. R. H. CORNER.



T-413. CROSS.



T-414. RUNNING.



T-415. END.

FIGURE	T-409	T-410	T-411	T-413	T-414	T-415
POLISHED BRASS EACH	4.00	3.75	3.75	4.25	3.50	3.50
NICKEL PLATED EACH	4.50	4.25	4.25	4.75	4.00	4.00

Bolts and Screws included in above lists.

When ordering Legs for Marble or Slate, state thickness of Backs, Partitions and Stiles.


T-420.
FRONT.


T-421.
L. H. CORNER.


T-422.
R. H. CORNER.


T-423.
CROSS.


T-424.
RUNNING.


T-425.
END.

PLAIN LEGS FOR MARBLE OR SLATE.

FIGURE	T-420	T-421	T-422	T-423	T-424	T-425
POLISHED BRASS . . . . . EACH	3.50	3.25	3.25	3.75	3.00	3.00
NICKEL PLATED . . . . . EACH	4.00	3.75	3.75	4.25	3.50	3.50


T-430.
FRONT.


T-431.
L. H. CORNER.


T-432.
R. H. CORNER.


T-433.
CROSS.


T-434.
RUNNING.


T-435
END.

ORNAMENTAL TOP STANDARDS FOR MARBLE OR SLATE.

FIGURE	T-430	T-431	T-432	T-433	T-434	T-435
POLISHED BRASS . . . . . EACH	4.00	3.75	3.75	4.25	3.50	3.50
NICKEL PLATED . . . . . EACH	4.50	4.25	4.25	4.75	4.00	4.00


T-440.
FRONT.


T-441.
L. H. CORNER.


T-442.
R. H. CORNER.


T-443.
CROSS.


T-444.
RUNNING.


T-445.
END.

PLAIN TOP STANDARDS FOR MARBLE OR SLATE.

FIGURE	T-440	T-441	T-442	T-443	T-444	T-445
POLISHED BRASS . . . . . EACH	3.50	3.25	3.25	3.75	3.00	3.00
NICKEL PLATED . . . . . EACH	4.00	3.75	3.75	4.25	3.50	3.50

Bolts and Screws included in above lists.

When ordering Legs or Top Standards for Marble or Slate, state thickness of Slabs, Partitions and Stiles.


T-450. FRONT.


T-451. L. H. CORNER.


T-452. R. H. CORNER.

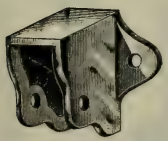

T-453. CROSS.

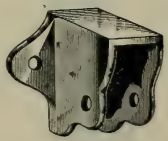

T-454. RUNNING.


T-455. END.

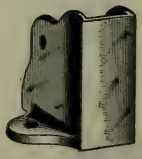
TOP STANDARDS FOR MARBLE OR SLATE. SHORT PATTERN.

FIGURE	T-450	T-451	T-452	T-453	T-454	T-455
POLISHED BRASS EACH	3.25	3.00	3.00	3.50	2.75	2.75
NICKEL PLATED EACH	3.75	3.50	3.50	4.00	3.25	3.25


T-460. LEFT TOP.


T-461. RIGHT TOP.


T-462. LEFT BOTTOM.


T-463. RIGHT BOTTOM.

CLAMPS FOR MARBLE OR SLATE.

FIGURE	T-460	T-461	T-462	T-463
POLISHED BRASS EACH	1.00	1.00	1.00	1.00
NICKEL PLATED EACH	1.25	1.25	1.25	1.25


T-464. TOP CENTER.


T-465. CENTER SUPPORT.


T-466. BOTTOM CENTER.


T-467. WALL PLATE.

CLAMPS FOR MARBLE OR SLATE.

FIGURE	T-464	T-465	T-466	T-467
POLISHED BRASS EACH	1.25	1.50	1.25	.75
NICKEL PLATED EACH	1.50	1.75	1.50	1.00

Bolts and Screws included in above lists.

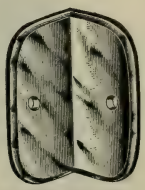
When ordering Top Standards or Clamps for Marble or Slate, state thickness of Slabs, Partitions and Stiles.



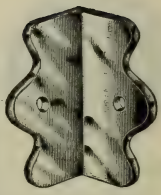
T-470. LIGHT PATTERN.



T-471. STANDARD.



T-472. HEAVY.



T-473. ORNAMENTAL.

ANGLE CLAMPS FOR MARBLE OR SLATE.

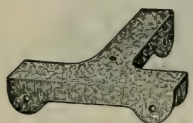
FIGURE		T-470	T-471	T-472	T-473
POLISHED BRASS	EACH	.40	.60	.70	.75
NICKEL PLATED	EACH	.50	.70	.80	.85



T-480. L. H. CORNER.



T-481. R. H. CORNER



T-482. FRONT.



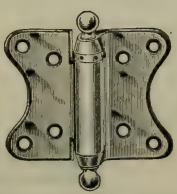
T-483. CROSS

GALVANIZED IRON CLAMPS FOR SLATE.

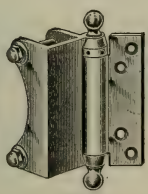
FIGURE		T-480	T-481	T-482	T-483
GALVANIZED	EACH	1.75	1.75	2.00	2.25



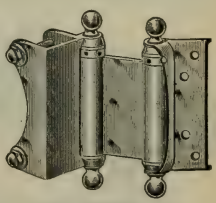
T-488. SURFACE HINGE, LIGHT.



T-489. SURFACE HINGE, HEAVY.



T-490. SINGLE BOX.



T-491. DOUBLE BOX.

SURFACE AND BOX FLANGED SPRING HINGES FOR STALLS.

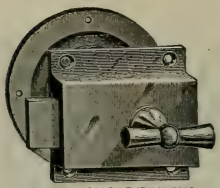
FIGURE		T-488	T-489	T-490	T-491
POLISHED BRASS	EACH	2.00	3.75	4.85	6.50
NICKEL PLATED	EACH	2.25	4.15	5.25	7.00

Bolts and Screws included in above lists.

When ordering Clamps for Marble or Slate, state thickness of Slabs, Partitions and Stiles.



T-500. OUTSIDE VIEW.



T-500. INSIDE VIEW.



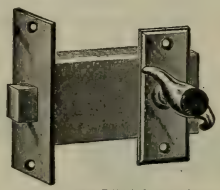
T-501. DOOR STOP.

STALL DOOR BOLTS AND STOPS.

FIGURE		T-500	T-501
POLISHED BRASS	EACH	4.00	3.00
NICKEL PLATED	EACH	4.50	3.50



T-504. STRIKE PLATE.



T-505. MORTISE BOLT.



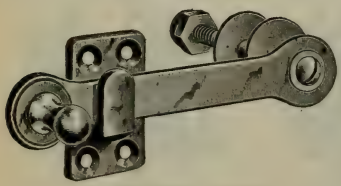
T-506. RIM BOLT.



T-507. DOOR STOP.

STALL DOOR BOLTS AND STRIKES.

FIGURE		T-504	T-505	T-506	T-507
POLISHED BRASS	EACH	.65	2.50	2.50	2.00
NICKEL PLATED	EACH	.75	3.00	3.00	2.50



*T-510. DOOR LATCH.



T-511. DOOR PULL.



†T-512. DOOR PULL.

DOOR LATCHES AND PULLS.

FIGURE		T-510	T-511	T-512
POLISHED BRASS	EACH	2.50	.75	1.00
NICKEL PLATED	EACH	3.00	1.00	1.50

* This is a strong, simple and handsome Latch for the inside of Stall Doors. Length, 5 inches.

† Height, 5 inches.

BOLTS FOR MARBLE OR SLATE.


T-520.


T-521.


T-522.


T-523.


T-524.


T-525.


T-526.

FIGURE	T–520	T–521	T–522	T–523	T–524	T–525	T–526
POLISHED BRASS PER DOZ.	2.00	1.75	2.10	1.50	1.50	1.50	1.25
NICKEL PLATED PER DOZ.	2.25	2.00	2.35	1.75	1.75	1.75	1.50

In ordering Bolts for Marble or Slate, state thickness of Slab.

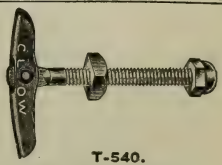

T-530.
OCTAGON.


T-531.
HEXAGON.


T-532.
SQUARE.


T-535.
WASHER.


T-536.
SQUARE NUT.



T-540.
TOGGLE BOLT.

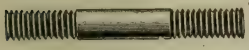
BOLT HEADS, NUTS AND WASHERS.

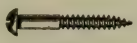
FIGURE	T–530	T–531	T–532	T–535	T–536
POLISHED BRASS PER DOZ.	1.25	1.00	1.00	.40	.40
NICKEL PLATED PER DOZ.	1.50	1.25	1.25	.50	----

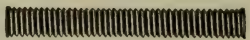
PATENT STEEL TOGGLE BOLTS.—T-540.

STOCK SIZES	$\frac{5}{32}$ x 3	$\frac{5}{32}$ x 4	$\frac{3}{16}$ x 2½	$\frac{3}{16}$ x 3	$\frac{3}{16}$ x 4	¼ x 3	¼ x 4
PER DOZEN	.70	.75	.75	.75	.75	1.10	1.10

Other sizes to order. Sample sent upon application.


T-545.
BRASS ROD, THREADED.


T-547.
ROUND HEAD BRASS SCREW.


T-549.
BRASS ROD, CONTINUOUS THREAD.

ROUND HEAD BRASS SCREWS, NICKEL PLATED.—T-547.

SIZE	9 Gauge.				10 Gauge.				12 Gauge.		
LENGTH INCHES	¾	1	1¼	1½	¾	1	1¼	1½	2	2½	3
PER DOZEN	.20	.25	.30	.35	.20	.25	.30	.35	.40	.50	.75

T-545, T-549—¼-inch Brass Rod, Threaded; any length to order.



T-575.
With Wood Screw.



T-577.
With Brass Bolt, N. P. Nut and Washer. For marble or slate partitions.



T-579.
With Iron Bolt and Nut. For marble or slate partitions.



T-581.
With Iron Expansion Bolt. For marble or slate partitions.

NICKEL PLATED BRASS PIPE HOLDERS.

SIZE	⅜	½	¾	1	1¼	1½	2
T-575 OR T-579 EACH	.45	.45	.50	.60	.70	1.00	1.25
T-577 OR T-581 EACH	.50	.50	.60	.70	.80	1.20	1.50

These holders are made for Iron Pipe Size Brass Pipe. T-575 has wood screw 2½ inches long; T-577 has brass bolt 2½ inches long; T-579 has iron bolt 2½ inches long; T-581 has expansion bolt 4 inches long. Dimensions are all from back of pipe.



T-590.—LITTLE GIANT EXPANSION SCREW SLEEVES.

LAG SCREW SIZES					WOOD SCREW SIZES		
DIAMETER OF LAG SCREW INCHES	⅜	½	⅝	¾	No. 10 or 12 Wire.	No. 14 or 16 Wire.	No. 18 or 20 Wire.
LENGTH OF SLEEVE INCHES	1¾	2	2¼	2½	1⅛	1¼	1½
SIZE OF DRILL TO USE INCHES	5/16	11/32	13/32	7/16	5/16	13/32	7/16
PRICE OF SLEEVES PER DOZEN	1.20	1.60	2.00	2.40	.90	1.00	1.10
SPECIAL FOR MARBLE OR SLATE.							
WOOD SCREW SIZES					No. 10 or 12 Wire.	No. 14 or 16 Wire.	No. 18 or 20 Wire.
LENGTH OF SLEEVE INCHES					1⅛	1¼	1½
SIZES OF DRILL TO USE INCHES					5/16	13/32	7/16
PRICE OF SLEEVES PER DOZEN					.75	.85	.95

The Sleeves are made of a composition sufficiently soft for the screw to make its own thread, thus securing a uniform expansion the entire length of the screw and bind so tight that the screw will break before the sleeve will start. No wedge nut is needed.



T-595.

IRON, SQUARE-HEAD EXPANSION BOLTS.

DIAMETER OF BOLTS . . . . . INCHES	¼	5/16	⅜	7/16	½	⅝	¾	⅞	1
1¼ INCHES LONG . . . . . PER DOZEN	1.50	----	----	----	----	----	----	----	----
2 INCHES LONG . . . . . PER DOZEN	1.50	1.70	----	----	----	----	----	----	----
2¼ INCHES LONG . . . . . PER DOZEN	1.50	1.70	2.20	----	----	----	----	----	----
3 INCHES LONG . . . . . PER DOZEN	1.50	1.70	2.20	2.90	3.45	----	----	----	----
3¼ INCHES LONG . . . . . PER DOZEN	1.60	1.75	2.25	2.90	3.45	4.70	----	----	----
4 INCHES LONG . . . . . PER DOZEN	1.60	1.75	2.25	2.90	3.45	4.70	6.85	----	----
4¼ INCHES LONG . . . . . PER DOZEN	1.60	1.75	2.25	2.95	3.50	4.70	6.85	----	----
5 INCHES LONG . . . . . PER DOZEN	1.65	1.80	2.30	2.95	3.50	4.70	6.85	8.40	----
5¼ INCHES LONG . . . . . PER DOZEN	1.65	1.80	2.30	2.95	3.50	4.75	6.90	8.40	12.00
6 INCHES LONG . . . . . PER DOZEN	1.65	1.80	2.30	3.00	3.50	4.75	6.90	8.40	12.00
6¼ INCHES LONG . . . . . PER DOZEN	----	----	2.30	3.00	3.60	4.75	6.90	8.50	12.00
7 INCHES LONG . . . . . PER DOZEN	----	----	2.35	3.00	3.60	4.75	6.90	8.50	12.00
7¼ INCHES LONG . . . . . PER DOZEN	----	----	2.35	3.00	3.60	4.75	7.00	8.50	13.00
8 INCHES LONG . . . . . PER DOZEN	----	----	2.35	3.00	3.60	4.80	7.00	8.75	13.00
9 INCHES LONG . . . . . PER DOZEN	----	----	----	3.00	3.65	4.80	7.00	8.75	13.00
10 INCHES LONG . . . . . PER DOZEN	----	----	----	----	3.65	4.80	7.00	8.75	13.50
11 INCHES LONG . . . . . PER DOZEN	----	----	----	----	3.65	4.80	7.00	8.75	13.50
12 INCHES LONG . . . . . PER DOZEN	----	----	----	----	3.65	4.80	7.00	9.00	14.00
LENGTH OF EXPANSION . . . . . INCHES	1½	1⅞	2⅜	2½	2⅝	3¼	4	4¾	5
SIZE OF HOLE TO RECEIVE EXPANSION . . . . . INCHES	½	9/16	11/16	⅞	⅞	1	1¼	1½	1⅝

The size of a bolt is always understood to be the diameter of the iron of which it is made, not of the expansion parts.

BRASS, SINGLE EXPANSION BOLTS.



T-597.



T-599.



T-601.

PRICES.—T-597.

DIAMETER . . . . . INCHES	¼	5/16	⅜
1¼ INCHES LONG . PER DOZEN	2.00	2.40	3.85
1½ INCHES LONG . PER DOZEN	2.05	2.50	3.90
1¾ INCHES LONG . PER DOZEN	2.10	2.60	4.00
2 INCHES LONG . PER DOZEN	2.15	2.70	4.10
2¼ INCHES LONG . PER DOZEN	2.20	2.75	4.15
2½ INCHES LONG . PER DOZEN	2.35	2.80	4.25
2¾ INCHES LONG . PER DOZEN	2.40	2.95	4.40
3 INCHES LONG . PER DOZEN	2.50	3.00	4.45
LENGTH OF EXPANSION . INCHES	1–1⅜	1–1⅜	1–1¾
SIZE OF HOLE TO RECEIVE EXPANSION INCHES	7/16	9/16	11/16

PRICES.—T-599 and T-601.

DIAMETER . . . . . INCHES	3/16 No. 9 or 10	7/32 No. 12 or 14	5/16 No. 18	⅜ No. 24
¾ INCHES LONG . PER DOZEN	1.40	----	----	----
1 INCH LONG . . PER DOZEN	1.45	1.80	----	----
1¼ INCHES LONG . PER DOZEN	1.50	1.85	----	3.35
1½ INCHES LONG . PER DOZEN	1.50	2.00	2.20	3.45
1¾ INCHES LONG . PER DOZEN	1.55	2.10	2.35	3.50
2 INCHES LONG . PER DOZEN	1.60	2.15	2.40	3.55
2¼ INCHES LONG . PER DOZEN	1.60	2.20	2.50	3.60
2½ INCHES LONG . PER DOZEN	1.65	2.35	2.60	3.65
2¾ INCHES LONG . PER DOZEN	1.70	2.40	2.70	3.85
3 INCHES LONG . PER DOZEN	1.75	2.50	2.75	4.05
LENGTH OF EXPANSION INCHES	¾	1–1⅜	1–1⅜	1–1¼
SIZE OF HOLE TO RECEIVE EXPANSION . INCHES	⅜	7/16	9/16	11/16

Sample or Single Bolts charged at net list.
Nickel Plated Cap Nuts extra.



V-1.
FOR WOOD.



V-2.



V-3. FOR COCK HOLE.



V-4.



V-10. JEWEL CUP.



V-15. OVAL SOAP CUP.



V-25. CHAIN HOLDER.

CHAIN STAYS, SOAP CUPS AND CHAIN HOLDERS.

FIGURE	V-1	V-2	V-3	V-4	V-10	V-15	V-25
NICKEL PLATED PER DOZEN	2.50	3.75	4.25	6.50	9.00	36.00	6.00



V-30.
LAVATORY COCK HOLE COVER.

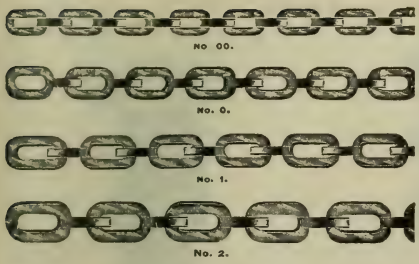


V-32.
BATH COCK HOLE COVER.

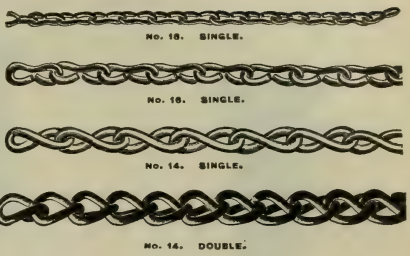


V-34.
BATH OVERFLOW HOLE COVER.

FIGURE	V-30	V-32	V-34
NICKEL PLATED PER DOZEN	4.50	9.00	12.00



V-38. SAFETY CHAIN.



V-39. JACK CHAIN.

SAFETY AND JACK CHAINS.—V-38 and V-39.

NUMBER	00	0	1	2	18 Single.	16 Single.	14 Single.	14 Double.
BRASS PER PACKAGE	1.25	1.50	1.85	2.30	.60	.86	1.35	1.90
PLATED PER PACKAGE	1.35	1.60	1.95	2.40	.75	1.07	1.69	2.37

Twelve yards of chain in each package.



V-42. CHAIN AND SNAPS FOR BASIN, BATH AND WASH TRAY.

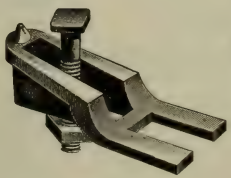
V-42		Brass	Plated
FOR BASINS, 16 INCHES LONG	PER DOZEN	----	1.10
FOR BATHS AND WASH TRAYS, 27 INCHES LONG	PER DOZEN	1.60	1.75
SNAPS ONLY, BASIN OR BATH SIZES	PER DOZEN	----	.75



V-44. STANDARD.



V-45. CONNOLLY.



V-46. MCVEY.



V-47. MAGIC.

BASIN CLAMPS.

FIGURE	V-44	V-45	V-46	V-47
PER DOZEN	.50	4.00	2.50	2.50

PLUGS WITH RUBBER STOPPERS.



V-55. COMMON OVERFLOW.



V-56. PATENT OVERFLOW.



V-57. WASH-TRAY PLUG.

BASIN PLUGS WITH RUBBER STOPPERS.—V-55 and V-56.

SIZE . . . . . INCHES	1	1¼
V-55. BRASS . . . . . PER DOZEN	4 50	7.50
V-55. NICKEL PLATED . . . . . PER DOZEN	5.50	9 00
V-56. BRASS . . . . . PER DOZEN	5 00	9.00
V-56. NICKEL PLATED . . . . . PER DOZEN	6.00	10.50

WASH-TRAY PLUGS WITH RUBBER STOPPERS.—V-57.

SIZE . . . . . INCHES	1	1¼	1½	2
V-57. BRASS . . . . . PER DOZEN	8.00	9.00	13.50	20 00
V-57. NICKEL PLATED . . . . . PER DOZEN	9.00	10 50	15.00	22 50



V-64. BATH OR SINK PLUG.



V-65. WASH-TRAY PLUG.



V-70. RUBBER STOPPER.

BATH, SINK, AND WASH-TRAY PLUGS WITH RUBBER STOPPERS.—V-64 and V-65.

SIZE . . . . . INCHES	1	1¼	1½	2
V-64. BRASS . . . . . PER DOZEN	2.00	2.25	3.50	5.00
V-64. NICKEL PLATED . . . . . PER DOZEN	2.50	2.75	4.00	6.00
V-65. BRASS . . . . . PER DOZEN	2.50	3.25	4.00	6.00
V-65. NICKEL PLATED . . . . . PER DOZEN	3.50	4.25	5.00	7.50

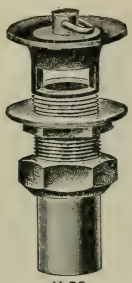
RUBBER STOPPERS.—V-70.

SIZE . . . . . INCHES	⅞	1	1⅛	1¼	1½	2
V-70 . . . . . PER DOZEN	1.00	1.00	1.00	1.25	1.75	2.50



V-80.
COMMON OVERFLOW.

Nickel Plated Common Overflow Basin Plug with Metal Stopper.
Per dozen - - - $8.50



V-82.
PATENT OVERFLOW.

Nickel Plated Patent Overflow Basin Plug with Metal Stopper.
Per dozen - - - $9.50



V-84.
BASIN GRATE.

Nickel Plated Basin or Safe Waste Grate, 1 inch.
Per dozen - - $12.00



V-90
BATH OR SINK PLUG.



V-92.
WASH TRAY PLUG.

BATH AND WASH TRAY PLUGS WITH METAL STOPPERS.—V-90 and V-92.

SIZE - - - - - - - - - - - - INCHES	¾	1	1¼	1½	2	2½	3	4
V-90. POLISHED BRASS - - - PER DOZEN	2.00	2.50	3.00	4.00	7.00	15.00	18.00	36.00
V-90. NICKEL PLATED - - - PER DOZEN	2.50	3.00	3.50	4.50	8.00	17.00	21.00	40.00
V-92. POLISHED BRASS - - - PER DOZEN	----	----	6.00	7.00	10.00	17.00	22.00	44.00
V-92. NICKEL PLATED - - PER DOZEN	----	----	7.50	8.75	13.00	20.00	25.00	50.00



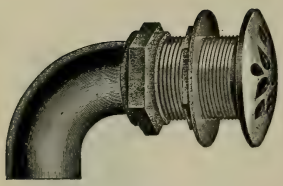
V-97. SLATE OR SOAPSTONE SINK PLUG.

SINK OR BATH PLUGS WITH METAL STOPPERS.
V-97 and V-99.

SIZE - - - - - - - - - - - - INCHES	1	1¼	1½	2
V-97. POLISHED BRASS - - - PER DOZEN	15.00	16.00	26.00	40.00
V-97. NICKEL PLATED - - - PER DOZEN	17.00	19.00	29.00	44.00
V-99. POLISHED BRASS - - - PER DOZEN	15.00	18.00	24.00	32.00
V-99. NICKEL PLATED - - - PER DOZEN	16.00	20.00	26.00	34.00

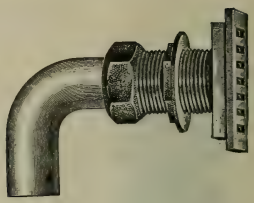


V-99. BATH PLUG, IRON PIPE.



V-109.

Nickel Plated Overflow Grate for Porcelain or Slate Wash Trays. Each, ... $3.25



V-111.

Nickel Plated Overflow Grate for Porcelain or Slate Pantry Sinks. Each, ... $2.25



V-114.

SINK PLUG WITH RAISED STRAINER.—V-114.

SIZE OF COUPLING	1¼	1½	2
NICKEL PLATED . . . EACH	3.00	4.00	4.50

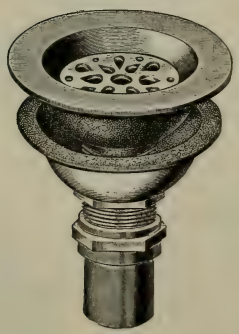
SINK PLUG WITH FLAT STRAINER.—V-118.

SIZE OF COUPLING	1½	2	3
NICKEL PLATED . . . EACH	4.00	4.50	5.75

The diameter of Strainer we make to fit any Sink opening. In ordering give diameter of this Flange.



V-118. SINK GRATE.



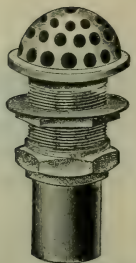
V-121.

Nickel Plated Drip Cup for Marble Drinking Fountain. Each $3.00



V-123.

Finished Brass Bell Trap Floor Drain.
2-inch Connection. Each $2.75
Nickel Plated. Each 3.00



V-129. RAISED STRAINER, FOR LEAD PIPE.



V-131. RAISED STRAINER, FOR IRON PIPE.



V-133. SAFE WASTE VALVE.

RAISED STRAINERS.—V-129 and V-131.

SIZE . . . . . INCHES	1	1¼	1½	2	2½
V-129. FINISHED BRASS . . . . . EACH	1.10	2.25	3.00	3.50	4.00
V-129. NICKEL PLATED . . . . . EACH	1.25	2.50	3.25	4.00	4.50
V-131. FINISHED BRASS . . . . . EACH	.65	1.75	2.50	3.00	3.50
V-131. NICKEL PLATED . . . . . EACH	.75	2.00	2.75	3.50	4.00

BRASS SAFE WASTE VALVES.—V-133.

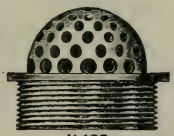
SIZE . . . . . INCHES	¾	1	1¼	1½	2
FINISHED . . . . . EACH	.75	1.00	1.25	1.75	2.25



V-136. WITH FLANGE.



V-137. WITH TRAP SCREW.



V-138. FOR IRON PIPE.



V-150. CONVEX STRAINER.



V-152. FANCY STRAINER.

RAISED STRAINERS.—V-136.

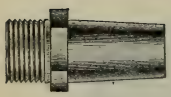
DIAMETER OF FLANGE . . . . . INCHES	2	3	3½	4
V-136. FINISHED . . . . . PER DOZEN	8.00	12.00	18.00	24.00
V-136. NICKEL PLATED . . . . . PER DOZEN	10.00	15.00	22.00	30.00

RAISED STRAINERS.—V-137 and V-138.

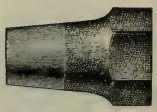
SIZE . . . . . INCHES	2	2½	3	4
V-137. FINISHED . . . . . PER DOZEN	15.00	21.00	30.00	48.00
V-137. NICKEL PLATED . . . . . PER DOZEN	17.00	24.00	34.00	54.00
V-138. FINISHED . . . . . PER DOZEN	13.00	18.00	26.00	44.00
V-138. NICKEL PLATED . . . . . PER DOZEN	15.00	21.00	30.00	50.00

CONVEX AND FANCY STRAINERS.—V-150 and V-152.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	4	5	6
FANCY, FINISHED . . . . PER DOZEN	.60	.85	1.20	1.45	1.80	2.40	3.00	4.80	9.00	12.00
CONVEX, FINISHED . . . PER DOZEN	.95	1.40	1.80	2.40	3.00	3.60	4.20	6.00	12.00	15.00



V-200. MALE.



V-202. FEMALE.



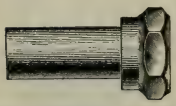
V-204. BENT, MALE.



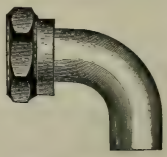
V-206. BENT, FEMALE.

SOLDERING NIPPLES.—V-200, V-202, V-204, and V-206.

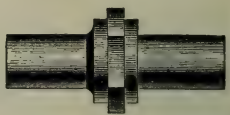
SIZE . . . . . INCHES	¼	⅜	½	¾	1	1¼	1½	2	2½	3
V-200, V-202 . . . . . PER DOZEN	1.75	2.25	3.00	4.00	5.00	7.50	10.00	14.00	28.00	40.00
V-204, V-206 . . . . . PER DOZEN	2.75	3.25	4.50	5.50	9.00	12.00	16.00	22.00	-----	-----



V-208. UNION, STRAIGHT.



V-210. UNION, BENT.



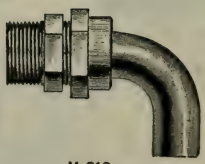
V-212. PLAIN COUPLING.

SOLDERING UNIONS AND PLAIN COUPLINGS.—V-208, V-210, and V-212.

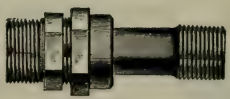
SIZE . . . . . INCHES	¼	⅜	½	⅝	¾	1	1¼	1½	2
V-208 . . . . . PER DOZEN	2.25	2.75	3.25	----	4.00	6.00	8.50	12.00	18.00
V-210 . . . . . PER DOZEN	3.00	3.75	4.75	----	6.50	9.00	11.50	17.00	24.00
V-212 . . . . . PER DOZEN	4.00	4.50	5.00	6.50	8.00	12.00	18.00	24.00	36.00



V-214. STRAIGHT COUPLING.



V-216. BENT COUPLING.



V-218. STRAIGHT COUPLING. IRON PIPE.



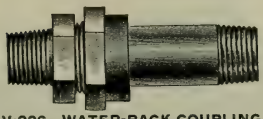
V-220. BENT COUPLING, IRON PIPE.

BOILER COUPLINGS.—V-214, V-216, V-218, and V-220.

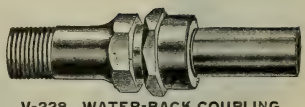
SIZE . . . . . INCHES	½	¾	1
V-214. PLAIN FACE . . . . . PER DOZEN	7.50	8.00	11.00
V-214. GROUND FACE . . . . . PER DOZEN	8.50	9.00	12.50
V-216. PLAIN FACE . . . . . PER DOZEN	8.50	9.00	12.00
V-216. GROUND FACE . . . . . PER DOZEN	9.50	10.00	13.50
PLAIN (THREE BENT, ONE STRAIGHT) . . . . . PER SET	----	2.50	----
GROUND (THREE BENT, ONE STRAIGHT) . . . . . PER SET	----	2.75	----
V-218. PLAIN FACE . . . . . PER DOZEN	----	12.00	16.00
V-218. GROUND FACE . . . . . PER DOZEN	----	13.00	17.50
V-220. PLAIN FACE . . . . . PER DOZEN	----	13.00	17.00
V-220. GROUND FACE . . . . . PER DOZEN	----	14.00	18.50



V-224. WATER-BACK COUPLING.



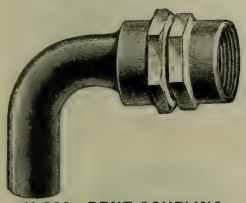
V-226. WATER-BACK COUPLING IRON PIPE.



V-228. WATER-BACK COUPLING, LONG SPUD.

WATER-BACK COUPLINGS.—V-224, V-226, and V-228.

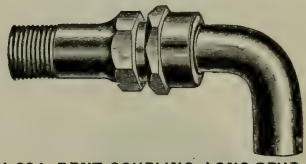
SIZE . . . . . INCHES	½	¾	1
V-224. PLAIN FACE . . . . . PER DOZEN	6.50	7.00	10.00
V-224. GROUND FACE . . . . . PER DOZEN	7.50	8.00	11.50
V-226. PLAIN FACE . . . . . PER DOZEN	7.50	9.00	13.00
V-226. GROUND FACE . . . . . PER DOZEN	8.50	10.00	14.50
V-228. STRAIGHT . . . . . PER DOZEN	----	10.00	----



V-230. BENT COUPLING.



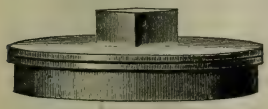
V-232. BENT COUPLING, IRON PIPE.



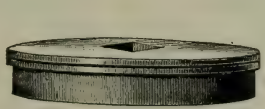
V-234. BENT COUPLING, LONG SPUD.

WATER-BACK COUPLINGS.—V-230, V-232, and V-234.

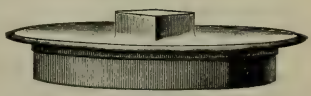
SIZE . . . . . INCHES	½	¾	1
V-230. PLAIN FACE . . . . . PER DOZEN	7.50	8.00	11.00
V-230. GROUND FACE . . . . . PER DOZEN	8.50	9.00	12.50
V-232. PLAIN FACE . . . . . PER DOZEN	9.50	11.00	15.00
V-232. GROUND FACE . . . . . PER DOZEN	10.50	12.00	16.50
V-234. BENT . . . . . PER DOZEN	----	11.00	----



V-260. TRAP SCREW.



V-262. TRAP SCREW, WITH SOCKET.



V-264. TRAP SCREW, WITH PROJECTING FLANGE.

TRAP SCREWS.—V-260, V-262, and V-264.

SIZE . . . . . INCHES	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
V-260. FINISHED . . . . PER DOZEN	1.80	2.25	2.50	3.00	4.00	7.00	10.00	15.00	18.00	20.00	27.50	42.50
V-260. NICKEL PLATED . PER DOZEN	----	----	----	----	----	11.00	15.00	20.00	23.50	26.00	36.50	54.50
V-262. FINISHED . . . . PER DOZEN	----	----	----	----	----	7.00	10.00	15.00	18.00	20.00	----	----
V-262. NICKEL PLATED . PER DOZEN	----	----	----	----	----	11.00	15.00	20.00	23.50	26.00	----	----
V-264. FINISHED . . . . PER DOZEN	----	----	----	----	----	11.00	14.50	20.00	23.50	26.00	35.50	----
V-264. NICKEL PLATED . PER DOZEN	----	----	----	----	----	15.50	19.50	26.00	30.50	35.00	47.50	----



V-266. TRAP SCREW WITH VENT COUPLING.



V-269.

N. P. Brass Covers for Drum Traps, - - Each, .50



V-270. IRON FERRULE, WITH TRAP SCREW.

TRAP SCREWS WITH VENT COUPLING.—V-266.

SIZE - INCHES	3	3½	4	5
FINISHED - PER DOZEN	21.00	25.00	28.00	35.50
NICKEL PLATED - PER DOZEN	28.50	33.50	38.00	50.50

Add to list for Bent Coupling instead of Straight, per dozen, 6.00.

IRON FERRULES WITH BRASS TRAP SCREW.—V-270.

SIZE - INCHES	2	3	4	5	6
WITH ROUGH BRASS TRAP SCREW - - - - - - - - - - - - EACH	.30	.40	.50	.90	1.20
WITH FINISHED TRAP SCREW - - - - - - - - - - - - - - EACH	.45	.60	.80	1.25	1.75
WITH NICKEL TRAP SCREW - - - - - - - - - - - - - - - EACH	.60	.80	1.10	1.60	2.30



V-290. BRASS FERRULE, WITH TRAP SCREW.



V-292. WITH STRAIGHT VENT COUPLING.



V-294. WITH STRAINER.

BRASS FERRULES WITH TRAP SCREW.—V-290.

SIZE - INCHES	2	3	4	5	6
STANDARD WEIGHT - - - - - - - - - - - - - - - - - - PER DOZEN	10.00	18.00	24.00	48.00	69.00
EXTRA HEAVY - PER DOZEN	14.00	27.00	41.00	68.00	90.00

BRASS FERRULES WITH STRAIGHT VENT COUPLING.—V-292.

SIZE - INCHES	2	3	4	5	6
WITH 1¼-INCH VENT COUPLING - - - - - - - - - - - - PER DOZEN	21.50	31.50	41.50	65.50	83.50
WITH 1½-INCH VENT COUPLING - - - - - - - - - - - - PER DOZEN	25.00	35.00	45.00	69.00	87.00
WITH 2-INCH VENT COUPLING - - - - - - - - - - - - - PER DOZEN	31.00	41.00	51.00	75.00	93.00

If with Bent Vent Couplings, add to V-292 for 1¼-inch, 3.00; 1½-inch, 5.00; 2-inch, 6.00.

BRASS FERRULES WITH STRAINER.—V-294.

SIZE - INCHES	2	3	4	5	6
PER DOZEN -	11.00	22.00	33.00	59.00	80.00

BRASS FERRULES.



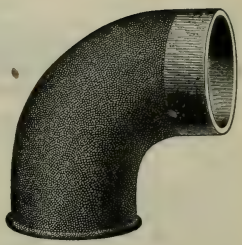
V-300.
REDUCING FERRULE.



V-302.
BRASS FERRULE.



V-304.
EIGHTH BEND.



V-306.
QUARTER BEND.

STANDARD BRASS FERRULES.

SIZE . . . . . INCHES	2x1¼	2x1½	2x1¾	2	3	4	5	6
V-300 . . . . . PER DOZEN	5.00	5.00	5.00	-----	-----	-----	-----	-----
V-302 . . . . . PER DOZEN	-----	-----	-----	5.00	10.00	15.00	24.00	36.00
V-304 . . . . . PER DOZEN	-----	-----	-----	12.00	-----	24.00	-----	-----
V-306 . . . . . PER DOZEN	-----	-----	-----	15.00	-----	27.00	-----	-----

EXTRA HEAVY BRASS FERRULES.

SIZE . . . . . INCHES	2x1¼	2x1½	2	3	4	5	6
V-300 . . . . . PER DOZEN	9.00	9.00	-----	-----	-----	-----	-----
V-302 . . . . . PER DOZEN	-----	-----	9.00	17.00	22.00	-----	-----
V-304 . . . . . PER DOZEN	-----	-----	18.00	-----	36.00	-----	-----
V-306 . . . . . PER DOZEN	-----	-----	22.00	-----	40.00	-----	-----



V-310.
REDUCING, WITH HUB.



V-312.
STRAIGHT, WITH HUB.



V-314.
EIGHTH, WITH HUB.



V-316.
QUARTER, WITH HUB.

STANDARD BRASS FERRULES, WITH HUB.

SIZE . . . . . INCHES	2x1¼	2x1½	2	4
V-310 . . . . . PER DOZEN	8.00	8.00	-----	-----
V-312 . . . . . PER DOZEN	-----	-----	8.00	16.00
V-314 . . . . . PER DOZEN	-----	-----	12.00	24.00
V-316 . . . . . PER DOZEN	-----	-----	15.00	27.00

EXTRA HEAVY BRASS FERRULES, WITH HUB.

SIZE . . . . . INCHES	2x1¼	2x1½	2	4
V-310 . . . . . PER DOZEN	12.00	12.00	-----	-----
V-312 . . . . . PER DOZEN	-----	-----	12.00	24.00
V-314 . . . . . PER DOZEN	-----	-----	18.00	36.00
V-316 . . . . . PER DOZEN	-----	-----	22.00	40.00

CAST IRON SOIL-PIPE AND FITTINGS.



W-1. SINGLE HUB SOIL-PIPE.



W-2. DOUBLE HUB SOIL-PIPE.

SOIL-PIPE, FIVE FOOT LENGTHS.—W-1 and W-2.

SIZE . . . . . INCHES	2	3	4	5	6	8	10	12
STANDARD SINGLE HUB . . . . . PER FOOT	.24	.32	.40	.60	.70	1.25	2.00	3.00
EXTRA HEAVY SINGLE HUB . . . . . PER FOOT	.35	.65	.80	1.15	1.30	2.25	3.00	4.00
STANDARD DOUBLE HUB . . . . . PER FOOT	.30	.38	.46	.70	.85	1.45	2.40	3.50
EXTRA HEAVY DOUBLE HUB . . . . . PER FOOT	.41	.71	.86	1.25	1.45	2.55	3.60	4.60
WEIGHT STANDARD SINGLE HUB . . . . . PER FOOT	3½	4½	6½	8½	10	17	23	33
WEIGHT EXTRA HEAVY SINGLE HUB . . . PER FOOT	5½	9½	13	17	20	34	45	54



W-4. QUARTER BEND.



W-5. QUARTER BEND, WITH 2-IN. SIDE INLET. EITHER RIGHT OR LEFT SIDE.



W-6. QUARTER BEND, HEEL OUTLET.



W-7. QUARTER BEND, DOUBLE HUB.



W-8. LONG SWEEP QUARTER BEND.

QUARTER BENDS.

SIZE . . . . . INCHES	2	3	4	5	6	8	10	12
W-4. STANDARD . . . . . EACH	.40	.65	.80	1.50	2.00	3.00	4.00	6.00
W-4. EXTRA HEAVY . . . . . EACH	.50	.95	1.15	2.00	2.75	4.00	5.00	8.00
W-5. STANDARD* . . . . . EACH	1.40	1.65	1.85	2.50	3.00	----	----	----
W-5. EXTRA HEAVY* . . . . . EACH	1.50	1.95	2.15	3.00	3.75	----	----	----
W-6. STANDARD* . . . . . EACH	.90	1.15	1.35	2.00	2.50	----	----	----
W-6. EXTRA HEAVY* . . . . . EACH	1.00	1.45	1.65	2.50	3.25	----	----	----
W-7. STANDARD . . . . . EACH	.70	.95	1.10	2.00	2.50	----	----	----
W-7. EXTRA HEAVY . . . . . EACH	.80	1.25	1.45	2.50	3.25	----	----	----
W-8. STANDARD . . . . . EACH	----	----	2.00	3.00	4.00	----	----	----
W-8. EXTRA HEAVY . . . . . EACH	----	----	2.75	4.00	5.50	----	----	----

*Prices given are for 2-inch inlet; 3 or 4-inch inlet can be furnished.



W-9. LONG QUARTER BEND.



W-10. LONG QUARTER BEND, WITH REST.



W-11. LONG QUARTER BEND, WITH HAND-HOLE, COVER AND REST.

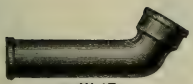
LONG QUARTER BENDS.

SIZE . . . . . INCHES	2	3	4	5	6	8
W-9. STANDARD* . . . . . EACH	1.10	1.10	1.75	2.50	3.00	5.50
W-9. EXTRA HEAVY* . . . . . EACH	1.50	1.80	2.50	3.50	4.50	7.00
W-10. STANDARD, ALL 18 INCHES IN THE CLEAR . . . . . EACH	1.60	2.25	2.75	3.50	4.00	----
W-10. EXTRA HEAVY, ALL 18 INCHES IN THE CLEAR . . . . . EACH	2.00	2.75	3.50	4.50	5.50	----
W-11. STANDARD, ALL 18 INCHES IN THE CLEAR . . . . . EACH	2.10	3.00	3.75	4.50	5.00	----
W-11. EXTRA HEAVY, ALL 18 INCHES IN THE CLEAR . . . . . EACH	2.50	3.50	4.50	5.50	6.50	----

*2 and 3-inch, 12 inches in the clear; 4-inch and larger, 18 inches.



W-16. SIXTH BEND.



W-17. LONG SIXTH BEND.



W-18. EIGHTH BEND.



W-19. EIGHTH BEND, DOUBLE HUB.



W-20. LONG EIGHTH BEND.



W-21. SIXTEENTH BEND.

SIXTH, EIGHTH AND SIXTEENTH BENDS.—W-16, W-17, W-18. W-19, W-20 and W-21.

SIZE . . . . . INCHES	2	3	4	5	6	8	10	12
W-16. STANDARD . . . . . EACH	.40	.65	.80	1.50	2.00	3.00	4.00	6.00
W-16. EXTRA HEAVY . . . . . EACH	.50	.95	1.15	2.00	2.75	4.00	5.00	8.00
W-17. EXTRA HEAVY, 18 INCHES LONG . . . EACH	----	----	2.25	----	----	----	----	----
W-18. STANDARD . . . . . EACH	.40	.65	.80	1.50	2.00	3.00	4.00	6.00
W-18. EXTRA HEAVY . . . . . EACH	.50	.95	1.15	2.00	2.75	4.00	5.00	8.00
W-19. STANDARD . . . . . EACH	.70	.95	1.10	2.00	2.50	----	----	----
W-19. EXTRA HEAVY . . . . . EACH	.80	1.25	1.45	2.50	3.25	----	----	----
W-20. STANDARD, 24 INCHES LONG . . . . . EACH	----	----	3.00	----	----	----	----	----
W-20. EXTRA HEAVY . . . . . EACH	----	----	4.00	----	----	----	----	----
W-21. STANDARD . . . . . EACH	.40	.65	.80	1.50	2.00	3.00	4.00	6.00
W-21. EXTRA HEAVY . . . . . EACH	.50	.95	1.15	2.00	2.75	4.00	5.00	8.00



W-27. T BRANCH.



W-28. T BRANCH, WITH 2-INCH SIDE INLET, RIGHT OR LEFT.



W-29. LONG T BRANCH.



W-30. T BRANCH, WITH HAND-HOLE AND COVER.



W-31. T BRANCH TAPPED FOR IRON PIPE.

T BRANCHES.—W-27 and W-28.

SIZE . . . . . INCHES	2x2	3x2	3x3	4x2	4x3	4x4	5x2	5x3	5x4	5x5
W-27. STANDARD . . . . . EACH	.60	.90	1.00	1.20	1.30	1.40	1.70	1.80	1.90	2.00
W-27. EXTRA HEAVY . . . . . EACH	.80	1.30	1.40	1.60	1.70	1.80	2.60	2.70	2.80	2.90

SIZE . . . . . INCHES	6x2	6x3	6x4	6x5	6x6	7	8	10	12	15
W-27. STANDARD . . . . . EACH	2.50	2.60	2.70	2.80	2.90	4.00	5.00	7.00	12.00	22.00
W-27. EXTRA HEAVY . . . . . EACH	3.50	3.60	3.70	3.80	3.90	6.00	8.00	11.00	16.00	-----

List above on 7-inch to 15-inch includes reducing sizes.
W-28, add to above list of prices, for 2-inch inlet, 1.00; 3-inch inlet, 1.25; 4-inch inlet, 1.50.

LONG T BRANCHES.—W-29.

SIZE . . . . . INCHES LENGTH IN THE CLEAR . . . . . INCHES	4x4 24	4x4 30	4x4 36	5x4 24	5x4 30	5x4 36	6x4 24	6x4 30	6x4 36
STANDARD . . . . . EACH	2.50	3.00	3.50	3.25	4.00	4.75	4.25	5.25	6.25
EXTRA HEAVY . . . . . EACH	3.50	4.75	5.25	4.50	5.50	6.75	5.50	7.25	9.00

T BRANCHES, WITH HAND-HOLE AND COVER.—W-30.

SIZE . . . . . INCHES	2x2	3x3	4x4	5x5	6x6	8x8
STANDARD . . . . . EACH	.80	1.20	1.50	2.00	3.00	5.00
EXTRA HEAVY . . . . . EACH	1.00	1.50	2.00	3.00	4.00	7.50

T BRANCHES TAPPED FOR IRON PIPE.—W-31.

SIZE . . . . . INCHES	2x1¼, 2x1½, 2x2	3x1¼, 3x1½, 3x2	4x1¼, 4x1½, 4x2	4x2, 4x2½, 4x3
STANDARD . . . . . EACH	1.35	1.55	1.95	1.95
EXTRA HEAVY . . . . . EACH	1.55	2.00	2.35	2.35



W-35. INCREASING QUARTER BEND.



W-36. INCREASING QUARTER BEND, WITH TRAP SCREW CLEANOUT.



*W-37. MILWAUKEE BEND, WITH FOOT REST.

SIZE — INCHES	4x6
W-35. STANDARD — EACH	----
W-35. EXTRA HEAVY — EACH	2.25
W-36. STANDARD — EACH	----
W-36. EXTRA HEAVY, WITH 4-INCH BRASS TRAP SCREW — EACH	4.75

SIZE — INCHES	4	5
W-37. STANDARD — EACH	3.25	4.25
W-37. EXTRA HEAVY — EACH	4.25	5.25

*Diameter of Circle, 36 inches.



W-44. SANITARY OR SHORT SWEEP BEND.



W-45. DOUBLE QUARTER BEND.



W-46. FIFTH BEND.

SIZE — INCHES	2	3	4	5	6
W-44. STANDARD — EACH	1.00	1.10	1.40	2.25	2.75
W-44. EXTRA HEAVY — EACH	1.50	1.80	2.00	3.00	4.00

SIZE — INCHES	3x2	4x2	4x3	4x4
W-45. STANDARD — EACH	1.25	1.65	2.00	2.50
W-45. EXTRA HEAVY — EACH	1.75	2.00	2.75	3.25

SIZE — INCHES	2	3	4	5	6	7	8	10	12	15
W-46. STANDARD — EACH	.40	.65	.80	1.50	2.00	2.25	3.00	4.00	6.00	10.00
W-46. EXTRA HEAVY — EACH	.50	.95	1.15	2.00	2.75	3.00	4.00	5.00	8.00	-----



W-54. INCREASING EIGHTH BEND.



W-61. INCREASING EIGHTH BEND, WITH TRAP SCREW CLEANOUT.



W-63. DOUBLE HUB, SIXTEENTH BEND.

SIZE — INCHES	4x6	2	3	4	5	6
W-54. STANDARD — EACH	----	----	----	----	----	----
W-54. EXTRA HEAVY — EACH	2.25	----	----	----	----	----
W-61. STANDARD — EACH	----	----	----	----	----	----
W-61. EXTRA HEAVY, WITH 4-IN. BRASS TRAP SCREW — EACH	4.75	----	----	----	----	----
W-63. STANDARD — EACH	----	.70	.95	1.10	2.00	2.50
W-63. EXTRA HEAVY — EACH	----	.80	1.25	1.45	2.50	3.25



W-72. SANITARY T BRANCH.



*W-73. SANITARY T BRANCH WITH 2-INCH SIDE OUTLET, RIGHT OR LEFT.



W-75. LONG SANITARY T BRANCH.



W-76. SANITARY T BRANCH, TAPPED FOR IRON PIPE.

SANITARY T BRANCHES.—W-72 and W-73.

SIZE . . . . . INCHES	2 x 2	3 x 2	3 x 3	4 x 2	4 x 3	4 x 4	5 x 2	5 x 3	5 x 4	5 x 5
W-72. STANDARD . . . . . EACH	.60	1.00	1.10	1.30	1.40	1.50	1.80	1.90	2.00	2.10
W-72. EXTRA HEAVY . . . . EACH	.90	1.40	1.50	1.70	1.80	1.90	2.70	2.80	2.90	3.00
SIZE . . . . . INCHES	6 x 2	6 x 3	6 x 4	6 x 5	6 x 6	7	8	10	12	
W-72. STANDARD . . . . . EACH	2.60	2.70	2.80	2.90	3.00	4.00	5.00	7.00	12.00	
W-72. EXTRA HEAVY . . . . . EACH	3.60	3.70	3.80	3.90	4.00	6.00	8.00	11.00	16.00	

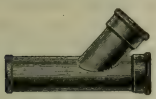
List above on 7-inch to 12-inch includes reducing sizes. *For prices, W-73, add to list of W-72. For 2-inch inlet, 1.00; 3-inch inlet, 1.25; 4-inch inlet, 1.50.

LONG SANITARY T BRANCHES.—W-75.

SIZE . . . . . INCHES	4 x 4	4 x 4	4 x 4	5 x 4	5 x 4	5 x 4	6 x 4	6 x 4	6 x 4
LENGTH IN THE CLEAR . . . INCHES	24	30	36	24	30	36	24	30	36
STANDARD . . . . . EACH	2.50	3.00	3.50	3.25	4.00	4.75	4.25	5.25	6.25
EXTRA HEAVY . . . . . EACH	3.50	4.75	5.25	4.50	5.50	6.75	5.50	7.25	9.00

SANITARY T BRANCHES TAPPED FOR IRON PIPE.—W-76.

SIZE . . . . . INCHES	2 x 1½	2 x 2	3 x 1½	3 x 2	4 x 1½	4 x 2	4 x 2½	4 x 3
STANDARD . . . . . EACH	1.35	1.35	1.55	1.55	1.95	1.95	1.95	1.95
EXTRA HEAVY . . . . . EACH	1.55	1.55	2.00	2.00	2.35	2.35	2.35	2.35



W-84. LONG Y BRANCH.



W-85. Y BRANCH.



W-86. Y BRANCH, WITH 2-INCH SIDE INLET, RIGHT OR LEFT.



W-87. Y BRANCH, WITH TRAP SCREW, RIGHT OR LEFT.

LONG Y BRANCHES.—W-84.

SIZE . . . . . INCHES	4 x 4	4 x 4	4 x 4	5 x 4	5 x 4	5 x 4	6 x 4	6 x 4	6 x 4
LENGTH IN THE CLEAR . . . INCHES	24	30	36	24	30	36	24	30	36
STANDARD . . . . . EACH	2.50	3.00	3.50	3.25	4.00	4.75	4.25	5.25	6.25
EXTRA HEAVY . . . . . EACH	3.50	4.75	5.25	4.50	5.50	6.75	5.50	7.25	9.00

Y BRANCHES.—W-85, W-86, and W-87.

SIZE . . . . . INCHES	2 x 2	3 x 2	3 x 3	4 x 2	4 x 3	4 x 4	5 x 2	5 x 3	5 x 4	5 x 5
W-84. STANDARD . . . . . EACH	.60	1.00	1.10	1.30	1.40	1.50	1.80	1.90	2.00	2.10
W-84. EXTRA HEAVY . . . . EACH	.90	1.40	1.50	1.70	1.80	1.90	2.70	2.80	2.90	3.00
SIZE . . . . . INCHES	6 x 2	6 x 3	6 x 4	6 x 5	6 x 6	7	8	10	12	
W-84. STANDARD . . . . . EACH	2.60	2.70	2.80	2.90	3.00	4.00	5.00	7.00	12.00	
W-84. EXTRA HEAVY . . . . . EACH	3.60	3.70	3.80	3.90	4.00	6 00	8.00	11.00	16.00	

W-85. List above on 7-inch to 12-inch includes reducing sizes.
W-86. Add to above list of Y Branches: For 2-inch Inlet, 1.00; for 3-inch, 1.25; for 4-inch, 1.50.
W-87. Add to above list of Y Branches: Each, 2.50.



W-93.
TEE BRANCH,
HUB ENDS.



W-94.
SANITARY TEE BRANCH,
ALL HUB ENDS.



W-95.
SPECIAL REDUCING
SANITARY TEE BRANCH.

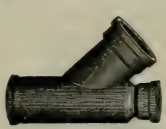


W-97.
INVERTED SANITARY TEE,
TAPPED FOR IRON PIPE.

SIZE . . . . . INCHES	2x2	4x2	4x4	4
W-93. STANDARD . . . . . EACH	----	----	----	1.50
W-94. STANDARD . . . . . EACH	.90	1.60	1.80	----

SIZE . . . . . INCHES	4x2x4	4x3x4	5x4x4	5x4x5	6x4x4	6x4x5	6x4x6	6x5x4	6x5x5	6x5x6
W-95. STANDARD . . . . . EACH	1.50	1.60	2.40	2.50	3.20	3.30	3.40	3.30	3.40	3.50
W-95. EXTRA HEAVY . . . . . EACH	1.90	2.00	3.40	3.50	4.20	4.30	4.40	4.30	4.40	4.50

SIZE . . . . . INCHES	2x1¼	2x1½	2x2	3x1¼	3x1½	3x2	4x1¼	4x1½	4x2	5x2
W-97. STANDARD . . . . . EACH	1.50	1.50	1.50	1.75	1.75	1.75	2.25	2.25	2.25	2.75
W-97. EXTRA HEAVY . . . . . EACH	2.00	2.00	2.00	2.25	2.25	2.25	2.75	2.75	2.75	3.50



W-100.
SPECIAL REDUCING
Y BRANCH.



W-101.
INVERTED Y BRANCH,
TAPPED FOR IRON PIPE.



W-102.
DOUBLE HALF Y BRANCH,
WITH SIDE INLET.



W-103.
DOUBLE ANGLE
Y BRANCH.

SIZE . . . . . INCHES	4x2x4	4x3x4	5x4x4	5x4x5	6x4x4	6x4x5	6x4x6	6x5x4	6x5x5	6x5x6
W-100. STANDARD . . . . . EACH	1.50	1.60	2.40	2.50	3.20	3.30	3.40	3.30	3.40	3.50
W-100. EXTRA HEAVY . . . . . EACH	1.90	2.00	3.40	3.50	4.20	4.30	4.40	4.30	4.40	4.50

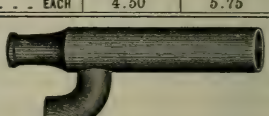
SIZE . . . . . INCHES	2x1¼	2x1½	2x2	3x1¼	3x1½	3x2	4x1¼	4x1½	4x2	5x2
W-101. STANDARD . . . . . EACH	1.50	1.50	1.50	1.75	1.75	1.75	2.25	2.25	2.25	2.75
W-101. EXTRA HEAVY . . . . . EACH	2.00	2.00	2.00	2.25	2.25	2.25	2.75	2.75	2.75	3.50

W-102. Add to list of Double Half Y Branches (W-125) for 2-inch Inlet, $1.00; 3-inch, $1.25; 4-inch, $1.50.

SIZE . . . . . INCHES	4x4x4	5x4x4	6x4x4
W-103. STANDARD . . . . . EACH	3.50	4.50	5.75
W-103. EXTRA HEAVY . . . . . EACH	4.50	5.75	7.25



W-110. VENTILATING BRANCH,
TAPPED FOR IRON PIPE.



W-111. LONG INCREASER FOR CALKING,
TAPPED BRANCH.

SIZE . . . . . INCHES	2x1¼, 2x1½, 2x2	3x1¼, 3x1½, 3x2	4x1¼, 4x1½, 4x2	5x2
W-110. STANDARD . . . . . EACH	1.50	1.75	2.25	2.75
W-110. EXTRA HEAVY . . . . . EACH	2.00	2.25	2.75	3.50

W-111. SIZE . . . . . INCHES	2 to 4	2 to 4	3 to 4	4 to 5	4 to 6	5 to 6	5 to 6
LENGTH . . . . . INCHES	24	48	24	30	48	30	36
SIZE OF PIPE THREAD . . . . . INCHES	1½	1½	1½	2	2	2	2
EXTRA HEAVY . . . . . EACH	3.50	4.75	3.60	5.25	7.50	6.50	7.00



W-115.
DOUBLE Y BRANCH.



W-116.
DOUBLE Y BRANCH, WITH 2-INCH SIDE INLET, RIGHT OR LEFT.



W-117.
DOUBLE Y BRANCH, WITH TRAP SCREW, RIGHT OR LEFT.

SIZE . . . . . INCHES	2x2	3x2	3x3	4x2	4x3	4x4	5x2	5x3	5x4	5x5
W-115. STANDARD . . . . . EACH	1.20	1.60	1.75	1.95	2.10	2.25	2.70	2.85	3.00	3.15
W-115. EXTRA HEAVY . . . . . EACH	1.50	2.10	2.25	2.70	2.85	3.00	3.80	3.95	4.10	4.25

SIZE . . . . . INCHES	6x2	6x3	6x4	6x5	6x6	7	8	10	12
W-115. STANDARD . . . . . EACH	3.50	3.65	3.80	3.95	4.10	5.50	6.00	9.00	14.00
W-115. EXTRA HEAVY . . . . . EACH	4.90	5.05	5.20	5.35	5.50	7.00	9.00	14.00	18.00

Above list on 7-inch to 12-inch includes reducing sizes. W-116. Add to above list: For 2-inch inlet, 1.00; 3-inch inlet, 1.25; 4-inch inlet, 1.50. W-117. Add to above list 2.50 each.



W-124.
HALF Y BRANCH.



W-125.
DOUBLE HALF Y BRANCH.



W-126.
INVERTED Y BRANCH.

SIZE . . . . . INCHES	2x2	3x2	3x3	4x2	4x3	4x4	5x2	5x3	5x4	5x5
W-124. STANDARD . . . . . EACH	.60	1.00	1.10	1.30	1.40	1.50	1.80	1.90	2.00	2.10
W-124. EXTRA HEAVY . . . . . EACH	.90	1.40	1.50	1.70	1.80	1.90	2.70	2.80	2.90	3.00
W-125. STANDARD . . . . . EACH	1.20	1.60	1.75	1.95	2.10	2.25	2.70	2.85	3.00	3.15
W-125. EXTRA HEAVY . . . . . EACH	1.50	2.10	2.25	2.70	2.85	3.00	3.80	3.95	4.10	4.25
W-126. STANDARD . . . . . EACH	.80	1.25	----	1.50	1.50	----	2.25	2.25	2.25	----
W-126. EXTRA HEAVY . . . . . EACH	1.25	1.75	----	2.00	2.00	----	3.00	3.00	3.00	----

SIZE . . . . . INCHES	6x2	6x3	6x4	6x5	6x6	7	8	10	12
W-124. STANDARD . . . . . EACH	2.60	2.70	2.80	2.90	3.00	4.00	5.00	7.00	12.00
W-124. EXTRA HEAVY . . . . . EACH	3.60	3.70	3.80	3.90	4.00	6.00	8.00	11.00	16.00
W-125. STANDARD . . . . . EACH	3.50	3.65	3.80	3.95	4.10	5.50	6.00	9.00	14.00
W-125. EXTRA HEAVY . . . . . EACH	4.90	5.05	5.20	5.35	5.50	7.00	9.00	14.00	18.00



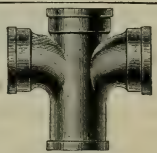
W-131.
CROSS, TAPPED.



W-132.
SANITARY CROSS, TAPPED.



W-133.
CROSS.



W-136.
SANITARY CROSS.

SIZE . . . . . INCHES	2x1½	2x2	3x1½	3x2	4x1½	4x2	4x2½	4x3
W-131. STANDARD, TAPPED . . . . . EACH	1.50	1.50	2.25	2.25	2.60	2.60	2.60	2.60
W-131. EXTRA HEAVY, TAPPED . . . . . EACH	2.00	2.00	2.75	2.75	3.00	3.00	3.00	3.00
W-132. STANDARD, TAPPED . . . . . EACH	1.75	1.75	2.50	2.50	3.00	3.00	3.00	3.00
W-132. EXTRA HEAVY, TAPPED . . . . . EACH	2.25	2.25	3.00	3.00	3.25	3.25	3.25	3.25

SIZE . . . . . INCHES	2x2	3x2	4x2	4x3	4x4	5x2	5x3	5x4	5x5	6x2	6x3	6x4	6x5	6x6
W-133. STANDARD . . . . . EACH	1.00	1.35	1.50	1.65	1.80	2.25	2.40	2.55	2.70	2.90	3.05	3.20	3.35	3.50
W-133. EXTRA HEAVY . . . . EACH	1.25	1.75	1.95	2.10	2.25	3.05	3.20	3.35	3.50	3.90	4.05	4.20	4.35	4.50
W-136. STANDARD . . . . . EACH	1.20	1.75	1.95	2.10	2.25	2.70	2.85	3.00	3.15	3.50	3.65	3.80	3.95	4.10
W-136. EXTRA HEAVY . . . . EACH	1.50	2.25	2.70	2.85	3.00	3.80	3.95	4.10	4.25	4.90	5.05	5.20	5.35	5.50



W-141. INCREASER AND VENT BRANCH, WITH STRAIGHT SIDE OUTLET.



W-142. INCREASER AND VENT BRANCH, WITH BENT SIDE OUTLET.



W-145. INCREASER AND VENT BRANCH, TAPPED FOR IRON PIPE.



W-146. ROOF PLATE.

SIZE . . . . . INCHES	2 x 4 Standard	2 x 4 Standard	4 x 6 Standard	4 x 6 Standard	4 x 6 Standard	2 x 4 Ex. Heavy	2 x 4 Ex. Heavy	4 x 6 Ex. Heavy	4 x 6 Ex. Heavy	4 x 6 Ex. Heavy
SIZE OUTLET . . . EACH	1½	2	1½	2	3	1½	2	1½	2	3
W-141 . . . . . EACH	----	1.75	----	2.25	3.00	----	2.25	----	3.00	3.75
W-142 . . . . . EACH	----	2.00	----	2.50	----	----	2.50	----	3.25	----
W-145 . . . . . EACH	2.15	2.25	2.75	2.90	3.50	2.65	2.75	3.50	3.65	4.25

ROOF PLATES.—W-146

SIZE . . . . . INCHES	3 Standard	4 Standard	5 Standard	6 Standard	8 Standard	3 Ex. Heavy	4 Ex. Heavy	5 Ex. Heavy	6 Ex. Heavy	8 Ex. Heavy
EACH	.40	.50	1.00	1.25	2.00	.60	.80	1.25	1.75	3.00



W-151. INCREASER, TAPPED FOR IRON PIPE.



W-152. INCREASER.



W-153. SHORT INCREASER, TAPPED FOR IRON PIPE.



W-156. VENTILATING BRANCH TO CALK OR TAPPED.



W-157. REDUCER.

SIZE . . . . . INCHES	1¼x4	2x4	2x5	3x5	3	4	5	6	7	8	10	12
W-151. STANDARD . . . . . EACH	1.40	1.50	1.75	2.00	----	----	----	----	----	----	----	----
W-151. EXTRA HEAVY. . . . EACH	1.75	1.85	2.35	2.60	----	----	----	----	----	----	----	----
W-152. STANDARD . . . . . EACH	----	----	----	----	.70	.90	1.15	1.25	1.60	2.00	4.00	6.00
W-152. EXTRA HEAVY. . . . EACH	----	----	----	----	1.00	1.25	1.75	2.25	2.75	5.00	6.50	8.50

SHORT INCREASERS, TAPPED FOR IRON PIPE.—W-153.

SIZE . . . . . INCHES	1¼x2	1¼x3	1¼x4	1½x2	1½x3	1½x4	2x3	2x4
EXTRA HEAVY . . . . . EACH	.85	1.00	1.20	.85	1.00	1.20	1.00	1.20

VENTILATING BRANCHES.—W-156.

SIZE . . . . . INCHES	2x2	3x2	4x2	4x3	5x2	5x4	6x4	8x4
TO CALK, STANDARD . . . . . EACH	.80	1.25	1.50	1.50	2.25	2.25	3.00	6.00
TO CALK, EXTRA HEAVY . . . . . EACH	1.25	1.75	2.00	2.00	3.00	3.00	4.00	8.50
TAPPED ON ONE SIDE, STANDARD . . . . . EACH	1.50	1.75	2.25	----	2.75	----	----	----
TAPPED ON ONE SIDE, EXTRA HEAVY . . . . . EACH	2.00	2.25	2.75	----	3.50	----	----	----

REDUCERS.—W-157

SIZE . . . . . INCHES	3x2	4x2	5x2	5x3 5x4	6x2	6x3 6x4	8x3 8x4	8x5 8x6	10x6 10x8	12x6 12x8
STANDARD . . . . . EACH	.50	.65	.85	.85	1.00	1.00	2.50	2.50	3.50	5.00
EXTRA HEAVY . . . . . EACH	.60	.75	1.10	1.10	1.35	1.35	3.50	3.50	4.50	8.00

Size of Spigot End governs the price.



W-165. OFFSET.



W-166. OFFSET, WITH 2-INCH OUTLET.



W-167. OFFSET INCREASER, WITH 6-INCH OFFSET.



W-168. OFFSET INCREASER, TAPPED FOR IRON PIPE, WITH 6-INCH OFFSET.

OFFSETS.—W-165.

SIZE . . . . . INCHES	2x4	2x6	2x8	2x10	2x12	3x4	3x6	3x8	3x10	3x12
STANDARD . . . . . EACH	.50	.60	.70	.80	.90	.90	1.00	1.10	1.25	1.40
EXTRA HEAVY . . . . . EACH	.90	1.00	1.10	1.20	1.30	1.25	1.35	1.50	1.65	1.80
SIZE . . . . . INCHES	4x2	4x4	4x6	4x8	4x10	4x12	4x14	4x16	4x18	4x20
STANDARD . . . . . EACH	.85	1.00	1.15	1.30	1.45	1.60	1.80	2.00	2.25	2.50
EXTRA HEAVY . . . . . EACH	1.25	1.40	1.60	1.80	2.00	2.25	2.50	2.75	3.25	3.75
SIZE . . . . . INCHES	5x4	5x6	5x8	5x12	5x16	6x4	6x6	6x8	6x10	6x12
STANDARD . . . . . EACH	1.70	1.90	2.10	2.50	3.00	2.00	2.25	2.50	2.75	3.00
EXTRA HEAVY . . . . . EACH	2.25	2.50	2.75	3.25	3.75	3.00	3.25	3.50	3.75	4.00

OFFSETS WITH 2-INCH OUTLET.—W-166.

SIZE . . . . . INCHES	4x4	4x6	4x8	4x10	4x12	4x14	4x16	4x18	4x20
STANDARD . . . . . EACH	1.50	1.65	1.80	1.95	2.10	2.30	2.50	2.75	3.00
EXTRA HEAVY . . . . . EACH	1.90	2.10	2.30	2.50	2.75	3.00	3.25	3.75	4.25

OFFSET INCREASERS.—W-167 and W-168.

SIZE . . . . . INCHES	1½ x 4	2 x 4	3 x 4	4 x 5	4 x 6	6 x 8
W-108. EXTRA HEAVY . . . . . EACH	----	2.00	2.80	3.00	3.25	4.00
W-109. EXTRA HEAVY . . . . . EACH	2.10	2.25	----	----	----	----



W-173. FOR CALKING.

LONG INCREASERS.
EXTRA HEAVY.



W-174. TAPPED FOR IRON PIPE.

SIZE . . . . . INCHES	1½ x 4 x 24	2 x 4 x 24	2 x 4 x 48	3 x 4 x 24	4 x 5 x 30	4 x 6 x 48	5 x 6 x 30	5 x 6 x 36
W-173. EXTRA HEAVY . . . . EACH	----	2.50	3.75	2.60	4.25	6.50	5.50	6.00
W-174. EXTRA HEAVY . . . . EACH	2.50	2.60	----	----	----	----	----	----



W-179. TO CALK, TAPPED ON SIDE.

LONG INCREASERS.
TO CALK—TAPPED ON SIDE FOR IRON PIPE. 2 AND 3-INCH TAPPED 1½—OTHER SIZES, 2-INCH.



W-180. TO CALK, TAPPED TWO SIDES.

SIZE . . . . . INCHES	2 x 4 x 24	2 x 4 x 48	3 x 4 x 24	4 x 5 x 30	4 x 6 x 48	5 x 6 x 30	5 x 6 x 36
W-179. STANDARD . . . . . EACH	2.50	3.40	2.60	4.00	6.00	5.00	5.50
W-179. EXTRA HEAVY . . . . . EACH	3.25	----	3.35	5.00	----	6.50	7.00
W-180. STANDARD . . . . . EACH	3.25	4.15	3.35	4.75	6.75	5.75	6.25
W-180. EXTRA HEAVY . . . . . EACH	4.00	----	4.10	5.75	----	7.00	8.00


W-185.
VENT CAP.


W-186.
DOUBLE HUB.


W-187.
SINGLE HUB.


W-191.
STRAIGHT SLEEVE.


W-192.
PLUG.

VENTILATING CAPS, SHORT AND LONG.—W-185.

SIZE . . . . . INCHES	2	3	4	5	6
STANDARD . . . . . EACH	.40	.60	.80	1.25	1.75
EXTRA HEAVY . . . . . EACH	.60	.80	1.25	2.50	3.50

SIZE . . . . . INCHES	2	3	4	5	6	8	10	12
W-186. STANDARD . . . . . EACH	.30	.55	.70	1.00	1.20	2.50	3.50	5.00
W-186. EXTRA HEAVY . . . . . EACH	.45	.70	.85	1.35	1.60	3.50	4.50	8.00
W-187. STANDARD . . . . . EACH	.30	.50	.65	.85	1.00	2.50	3.50	5.00
W-187. EXTRA HEAVY . . . . . EACH	.40	.60	.75	1.10	1.35	3.50	4.50	8.00
W-191. STANDARD . . . . . EACH	.30	.55	.70	1.00	1.20	2.50	3.50	5.00
W-191. EXTRA HEAVY . . . . . EACH	.45	.70	.85	1.35	1.60	3.50	4.50	8.00
W-192. STANDARD . . . . . EACH	.15	.25	.30	.40	.50	1.20	2.00	3.00
W-192. EXTRA HEAVY . . . . . EACH	.25	.35	.40	.60	.75	1.50	3.00	4.00


W-198.
THIMBLE.


W-203.
PIPE HOOK.


W-197.
PIPE REST.


W-199.
SOIL-PIPE TEST PLUG.


W-204.
EXTENSION PIECE.

THIMBLES, PIPE RESTS, TEST PLUGS AND HOOKS.

SIZE . . . . . INCHES	2	3	4	5	6	8	10
W-197. STANDARD . . . . . EACH	.30	.40	.50	.60	.70	1.10	1.75
W-197. EXTRA HEAVY . . . . . EACH	.40	.55	.65	.80	1.00	1.75	2.50
W-198. STANDARD . . . . . EACH	.15	.25	.30	.35	.45	----	----
W-198. EXTRA HEAVY . . . . . EACH	.25	.40	.50	.60	.75	----	----
W-199. SOIL-PIPE TEST PLUGS . . . . . EACH	1.00	1.25	1.50	2.00	2.50	6.50	----
W-203. PIPE HOOKS . . . . . EACH	.08	.10	.12	.15	.20	.40	----
EXTRA RUBBERS FOR W-199 TEST PLUGS . . . . . EACH	.25	.50	.70	.90	1.20	----	----

EXTENSION PIECES.—W-204.

SIZE . . . . . INCHES	2x4	2x6	2x8	2x10	2x12	2x14	2x16	2x18	4x4
STANDARD . . . . . EACH	.30	.40	.45	.55	.65	.75	.85	.95	.65
EXTRA HEAVY . . . . . EACH	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.20

SIZE . . . . . INCHES	4x6	4x8	4x10	4x12	4x14	4x16	4x18	4x20	4x24
STANDARD . . . . . EACH	.75	.85	1.00	1.15	1.30	1.45	1.60	1.80	2.20
EXTRA HEAVY . . . . . EACH	1.30	1.40	1.50	1.60	1.80	2.00	2.20	2.40	2.80

SOIL PIPE FITTINGS.



W-220. S TRAP.



W-221. THREE-QUARTER S TRAP.



W-222. HALF S TRAP

PLAIN TRAPS.—W-220, W-221 and W-222.

SIZE ..... INCHES	2	3	4	5	6
STANDARD ..... EACH	.80	1.25	1.75	3.50	4.50
EXTRA HEAVY ..... EACH	1.25	2.00	2.75	4.50	6.00



W-226. S TRAP, WITH BRASS SCREW.



W-227. THREE-QUARTER S TRAP, WITH BRASS SCREW.



W-228. HALF S TRAP, WITH BRASS SCREW.

TRAPS WITH BRASS TRAP SCREW.—W-226, W-227 and W-228.

SIZE ..... INCHES	2	3	4	5	6
STANDARD ..... EACH	3.30	3.75	4.25	5.50	6.50
EXTRA HEAVY ..... EACH	3.75	4.50	5.25	6.50	8.00



W-232. S TRAP, WITH VENT.



W-233. THREE-QUARTER S TRAP, WITH VENT.



W-234. HALF S TRAP, WITH VENT.

TRAPS WITH HUB VENT.—W-232, W-233 and W-234.

SIZE ..... INCHES	2	3	4	5	6
STANDARD ..... EACH	1.25	1.75	2.25	4.00	5.00
EXTRA HEAVY ..... EACH	1.75	2.50	3.25	5.00	6.50

SOIL PIPE FITTINGS.



W-258 S TRAP, WITH VENT AND BRASS SCREW.



W-259. THREE-QUARTER S TRAP, WITH VENT AND BRASS SCREW.



W-260. HALF S TRAP, WITH VENT AND BRASS SCREW.

TRAPS WITH TRAP SCREW AND HUB VENT.—W-258, W-259 and W-260.

SIZE . . . . . INCHES	2	3	4	5	6
STANDARD . . . . . EACH	3.75	4.25	4.75	6.50	7.50
EXTRA HEAVY . . . . . EACH	4.25	5.00	5.75	7.50	9.00



W-266. S TRAP, WITH HAND-HOLE AND COVER.



W-267. THREE-QUARTER S TRAP, WITH HAND-HOLE AND COVER.



W-268. HALF S TRAP, WITH HAND-HOLE AND COVER.

TRAPS WITH HAND-HOLE AND COVER.—W-266, W-267 and W-268.

SIZE . . . . . INCHES	2	3	4	5	6
STANDARD . . . . . EACH	1.00	1.50	2.00	3.75	4.75
EXTRA HEAVY . . . . . EACH	1.50	2.25	3.00	4.75	6.25



W-272. RUNNING TRAP, WITH HUB VENT.



W-273. RUNNING TRAP, WITH DOUBLE HUB VENT.



W-274. RUNNING TRAP, WITH HAND-HOLE AND COVER.

RUNNING TRAPS.—W-272, W-273 and W-274.

SIZE . . . . . INCHES	2x2	3x2	3x3	4x4	6x4	6x6	8x4	8x6	10x6	12x6
W-272. STANDARD . . . . . EACH	1.25	1.75	1.85	2.50	5.25	5.50	9.75	10.00	16.00	22.00
W-272. EXTRA HEAVY . . . . . EACH	1.75	2.50	2.60	3.50	6.75	7.00	12.75	13.00	22.00	32.00
W-273. STANDARD . . . . . EACH	1.75	2.25	2.45	3.25	6.00	6.50	.....	11.00	17.00	23.00
W-273. EXTRA HEAVY . . . . . EACH	2.25	3.00	3.20	4.25	7.50	8.00	.....	14.00	23.00	33.00

SIZE . . . . . INCHES	2	3	4	5	6	7	8	10	12
W-274. STANDARD . . . . . EACH	1.00	1.50	2.00	3.75	4.75	7.25	9.25	15.00	21.00
W-274. EXTRA HEAVY . . . . . EACH	1.50	2.25	3.00	4.75	6.25	10.50	12.50	21.00	31.00



W-283. FULL S TRAP.



W-284. THREE-QUARTER S TRAP.



W-285. HALF S OR P TRAP.

TRAPS.—W-283, W-284 and W-285, with Hand-Holes and Covers, 2-inch Heel Inlets.

SIZE . . . . . INCHES	2	3	4	5	6
STANDARD . . . . . EACH	1.50	2.00	2.50	4.25	5.25
EXTRA HEAVY . . . . . EACH	2.00	2.75	3.50	5.25	6.75



W-295. FULL S TRAP.



W-296. THREE-QUARTER S TRAP.



W-297. HALF S OR P TRAP.

TRAPS.—W-295, W-296 and W-297, with Hand-Holes and Covers, 2-inch Side Inlets.

SIZE . . . . . INCHES	2	3	4	5	6
STANDARD . . . . . EACH	2.00	2.50	3.00	4.75	5.75
EXTRA HEAVY . . . . . EACH	2.50	3.25	4.00	5.75	7.25



W-302. PIPE BAND.



W-303. PIPE BAND, T BRANCH.



W-305. STRAINER.



W-306. AIR INLET.

SIZE . . . . . INCHES	2	3	4	5	6	8
W-302. STANDARD . . . . . EACH	.45	.60	.80	1.25	1.75	2.25
W-302. EXTRA HEAVY . . . . . EACH	.90	1.15	1.50	2.00	2.75	4.00
W-303. STANDARD . . . . . EACH	.75	1.00	1.25	1.75	2.25	3.00
W-303. EXTRA HEAVY . . . . . EACH	1.50	1.75	2.00	2.75	3.50	5.00
W-305 . . . . . EACH	.10	.15	.20	.25	.30	.65
W-306 . . . . . EACH	----	----	1.75	----	----	----

APPROXIMATE WEIGHTS OF SOIL PIPE AND FITTINGS.

	Standard								Extra Heavy							
SIZE . . . . . INCHES	2	3	4	5	6	8	10	12	2	3	4	5	6	8	10	12
PIPE . . . . . POUNDS PER FOOT	3½	4½	6½	8½	10	17	23	33	5½	9½	13	17	20	34	45	54
CROSSES . . . . . POUNDS EACH	5	10	12	16	24	..	45	..	10	20	24	32	48	85	..	..
DOUBLE Y BRANCH . . . . . POUNDS EACH	8	11	18	26	37	..	..	..	12	20	32	42	60	..	..	..
DOUBLE HUBS . . . . . POUNDS EACH	3	4	6	8	10	16	26	..	4½	7	8	11	14	28	47	..
EIGHTH BENDS . . . . . POUNDS EACH	3	4¾	6	8	11	24	32¾	..	4½	6½	9½	12	16	35½	59½	..
HALF Y BRANCHES . . . . . POUNDS EACH	4½	6½	10	14	16	..	..	..	9	13	18	24	30	..	..	..
QUARTER BENDS . . . . . POUNDS EACH	4	5½	8	10	14½	34	41	..	6	8	12	15	20	44	74	..
REDUCERS . . . . . POUNDS EACH	..	3	4	6	8	9	..	..	..	4	6	8	11	16	..	..
SIXTH BENDS . . . . . POUNDS EACH	3	4¾	6	8	11	24	32¾	..	4¾	6¼	9½	12	16	35½	59½	..
SLEEVES . . . . . POUNDS EACH	2½	4	5	6	7	..	..	..	4	6	7	9	10	..	..	..
T BRANCHES . . . . . POUNDS EACH	4	8	10	15	20	38	55	..	7	13	20	25	34	50	104	..
TRAPS . . . . . POUNDS EACH	5½	10	19	26	35	..	..	..	9	18	28	45	68	..	..	..
Y BRANCHES . . . . . POUNDS EACH	5	9	13	18	25	42	70	..	10	15	25	32	45	85	151	..
SIZE . . . . . INCHES	..	..	..	2x8	3x8	4x12	5x12	6x8	..	..	..	2x8	3x8	4x12	5x12	6x8
OFFSETS . . . . . POUNDS EACH	..	..	..	5	8	15	20	22	..	..	..	9	15	23	30	38

F. & W. COMBINATION VENT AND RE-VENT FITTINGS.

PATENTED MAY 28, AND DEC. 17, 1901. OTHER PATENTS PENDING.



W-315.
Showing Vent and Re-vent Fittings in Stack.



W-318, A.

Size, in.	2	3
Size Hubs, in.	2	3
Length, in.	38	38
Each,	$2.70	$0.00

Short Pattern for 2-in. Cross, each, $2.00



W-319, B.

Size, in.	2	3
Size Hub, in.	2	3
Size Tap, in.	1½	2
Length, in.	38	38
Each,	$2.70	$0.00



W-328, C.

Size, in.	2	3
Size Hubs, in.	2	3
Length, in.	38	38
Each,	$2.50	$0.00

Short Pattern for 2-in. Cross, each, $2.00



W-329, D.

Size, in.	2	3
Size Hub, in.	2	3
Length, in.	38	38
Size Tap, in.	1½	2
Each,	$2.50	$0.00



W-337, E.

For Closets only.

Size, in.	2
Length, in.	26
Each,	$2.30



W-338, F.

Plain Offset.
For Closets only.

Size, in.	2
Length, in.	26
Each,	$1.50



W-340, G.

For Sinks and Lavatories.

Size, in.	2x1½
Length, in.	16
Size Vent, in.	1½
Each,	$1.80



W-341, H.

For Sinks and Lavatories.

Size, in.	2x1½
Length, in.	16
Size Vent, in.	1½
Each,	$1.10



W-348, I.

Basin Vent Tee.

Size Hubs, in.	2
Size Branch, in.	1½
Length, in.	16
Each,	$1.30



W-349, J.

Basin Vent.

Size Hub, in.	2
Size Branch, in.	1½
Length, in.	16
Each,	$1.10



W-351, K.

Double Basin Re-vent.

Size Spigot End, in.	2
Size Tap, in.	1½
Length, in.	16
Each,	$2.20



W-352, L.

Basin Re-vent Ell.

Size Hub, in.	1½
Size Tap, in.	1½
Each,	$0.50

F. & W. COMBINATION VENT AND RE-VENT FITTINGS.



W-356, M.

Extra Long ¼-Bend.

Size,	in. 2
Size Hub,	in. 2
Length,	in. 30
Each,	$1 50



W-357, N.

Tee with Vent Branch.

Size,	in. 4x2	2x2
Spread,	in. 8½	7
Length,	in. 10	10
Each,	$1.80	$1.20



W-360, UU.

For 4-inch Cross.



W-361, U.

For 2-inch Cross.

Where Cast Iron Re-vent is used.

W-360, UU.	Length, in. 27,	for 4-in. Cross,	each, $2.50
W-360, UU.	Length, in. 27,	for 5-in. Cross,	each, 2.50
W-361, U.	Length, in. 19,	for 2-in. Cross,	each, 1.50
W-361, U.	Length, in. 19,	for 3-in. Cross,	each, 1.50



W-365. TEE.

Size, in.	2	3	4	5
Size Vent, in.	1½	1½	2	2
Each,	$1.90	$2.30	$2.70	---

Made in Right and Left Hand.



W-367. DOUBLE VENT CROSS.

Size, in.	2x1½	2x2	3x1½	3x2	*4x4
Size Vent, in.	1½	1½	1½	1½	2
Each,	$2.80	$2.80	$3.30	$3.30	$4.20

*Calked.



W-371. INCREASER.

Size, in.	4x5x2	2x4x2	
Spread, C. to C.	8½	7	
Length, in.	26	24	
Each,	$2.60	$2.10	



W-373.



W-374.

SINGLE AND DOUBLE COMBINATION VENT AND WASTE.

Size Spigot End,	in.	2
Size Tap, A and B,	in.	1½
Distance, A to B,	in.	21
Total Length,	in.	38
W-373,	each,	$2.20
W-374,	each,	4.00



W-376.



W-377.

SPECIAL THREE-WAY TEES.

Used where Wrought Iron Re-vent is used with a Cross.

1½-inch Tee for 2-inch Cross,	$0.40
1½-inch Tee for 3-inch Cross,	.40
2-inch Tee for 4-inch Cross,	.50

By the use of the F. & W. Fittings, Siphonage is impossible. No rust can accumulate. There will always be circulation of air through both Vents and Re-vents, and every joint is under a water test that reduces the possibility of sewer gas in the building to a very small degree.

GREENHOUSE PIPE AND FITTINGS.

TESTED AND GUARANTEED.



W-386.

GREENHOUSE WATER PIPE.—W-386. (Lengths 5 Feet.)

SIZE	2	3	4	5	6	8
PER FOOT	.24	.32	.40	.60	.70	1.25



W-388. RETURN BEND.



W-389. RETURN BEND, DOUBLE HUB.



W-390. RETURN BEND, SPIGOT OUTLET.



W-391. RETURN BEND, HUB OUTLET.

FIGURE		W-388	W-389	W-390	W-391
SIZE, 3-INCH	EACH	1.00	1.25	1.75	----
SIZE, 4-INCH	EACH	1.50	1.75	2.00	2.00



W-395. H BRANCH.



W-396. DOUBLE ELBOW.



W-398. TRIPLE ELBOW.



W-399. THREE-WAY BRANCH TEE.

BRANCH FITTINGS FOR 4-INCH PIPE.

FIGURE	W-395	W-396	W-398	W-399
EACH	2.00	2.50	3.25	3.25



W-403. QUARTER BEND.



W-405. QUARTER BEND. DOUBLE HUB.



W-407. T BRANCH.



W-409. CROSS.



W-415. DOUBLE HUB.

SIZE . . . . . INCHES	2	3	4	5	6	4x3	4x2	5x4	5x3	6x5	6x4
W-403. QUARTER BEND	.40	.65	.80	1.50	2.00	----	----	----	----	----	----
W-405. QUARTER BEND	.70	.95	1.10	2.00	2.50	----	----	----	----	----	----
W-407. T BRANCH	.60	1.00	1.40	2.00	2.90	1.30	1.20	1.90	1.80	2.80	2.70
W-409. CROSS	1.00	1.50	1.80	2.70	3.50	1.65	1.50	2.55	2.40	3.35	3.20
W-415. DOUBLE HUB	.30	.55	.70	1.00	1.20	----	----	----	----	----	----

Oakum, see page 291. Calking Tools, see pages 399 and 409.



W-421. ROOF PLATE.



W-423. POST PLATE.



W-424. 4-INCH BUTTERFLY VALVE.



W-426. 4-INCH GREENHOUSE VALVE.

ROOF AND POST PLATES.—W-421 and W-423.

SIZE	1	1¼	1½
ROOF AND POST PLATE . . . . . PER SET	.85	1.00	1.25

BUTTERFLY AND GREENHOUSE VALVES.

FIGURE	W-424	W-426
EACH	3.50	6.00



W-430. WITH AUTOMATIC ATTACHMENT.



W-431. SECTIONAL VIEW OF DRAINER VALVE.



W-432. WITHOUT AUTOMATIC ATTACHMENT.

CLIMAX DRAINERS.—W-430 and W-432.

NUMBER	1	2	3	4	5	6
CAPACITY . . . . . GALLONS PER HOUR	50	100	150	200	275	350
WITH AUTOMATIC MOVEMENT . . . . . EACH	25.00	40.00	55.00	80.00	110.00	160.00
WITHOUT AUTOMATIC MOVEMENT . . . . . EACH	15.00	25.00	35.00	50.00	70.00	100.00

The capacity given above is based on a pressure of from 15 to 20 pounds, and on a lift of from 6 to 7 feet. The capacity depends entirely on the amount of water-pressure obtainable and lift.

The Climax Cellar Drainer is made for draining Cellars, Wheel Pits, Furnace Pits, etc., at the least possible expense and in a permanent and positively satisfactory manner. It is also desirable and largely used for removing waste-water from kitchens below level of sewer and removing drippings from ice boxes, and for any purpose where it is necessary to remove water economically from one level to a higher one.

Descriptive Circular sent upon application.

SISSON INSERTABLE JOINT, FOR SOIL PIPE.



W-450.

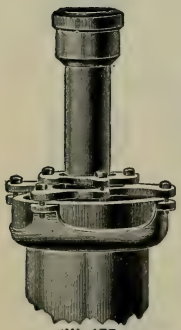
SIZE . . . . . INCHES	2	3	4	5	6
STANDARD . . . . . EACH	1.40	1.50	1.80	2.10	2.60
EXTRA HEAVY . . . . . EACH	1.50	1.70	2.00	2.30	2.80

With this fitting a most satisfactory connection can be made and labor and expense saved when a leak is discovered in the pipe or fitting already connected up.

DIRECTIONS.—Cut out of soil pipe the length of fitting it is desired to insert and 11/2 inches for this joint. Slip the lead ring which accompanies every joint over the pipe above, push the joint up as far as possible and drop this joint down into it. The lead ring will drop into the joint and rest upon the shoulders inside. Put in the packing, and the work is done.



W-450.
SECTIONAL VIEW.


W-455.

COMBINATION SEWER AND SOIL PIPE CONNECTION.

TAKES THE PLACE OF A CEMENT JOINT.

SIZE . . . . . INCHES	2x6	3x6	4x6	5x6	6x6
PRICE . . . . . EACH	6.00	6.00	6.00	7.00	8.00

This sewer connection is so arranged that the hub of the sewer pipe sets into an iron collar; this iron collar, which is on the outside of the sewer pipe hub, in turn connects with an iron flange with lugs, connected to the same in such a way that the bolting of the flange section and the collar section, makes a perfect sewer gas, air, water or pressure tight joint. On the inner side of the flange section connection there is a rubber gasket. When the soil pipe is placed in this connection there is an iron collar which fits around it and compresses this soft rubber gasket, making it air and water tight. This connection is made in two pieces and can be used where it is impossible to take out a length of pipe without damage to the old sewer already in place.

REPAIR PLATES.—W-457.



W-457.
REPAIR PLATE.

SIZE . . . . . INCHES	2	3	4	5	6
EACH	.20	.25	.30	.35	.45

These Plates can be easily applied or removed, and form no obstructions on inside of pipe.

ACME SOIL PIPE CLAMPS.—W-459.

FOR SOIL PIPE . . . INCHES	2	3	4	5	6
EACH	.08	.10	.12	.20	.25

Will fit flat or in corner, Standard or Extra Strong Soil Pipe, and can be fastened up before the pipe is strung.


W-459.
SOIL PIPE CLAMP.



W-475. PIPE REST.

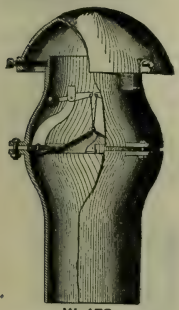
PIPE RESTS.

FOR SOIL PIPES OR STEAM PIPES.

SIZE . . . . . INCHES	¾	1	1¼	1½	2	2½	3	4	5	6
PLAIN, WITHOUT NIPPLE . . . EACH	.18	.22	.27	.35	.40	.45	.50	.65	.80	1.25
GALVANIZED, WITHOUT NIPPLE . EACH	.20	.25	.30	.40	.50	.60	.65	.80	.95	1.50

TAPPING.

SIZE . . . . . INCHES	¾ to 2	3 and 4	5 and 6
TAPPED FOR PIPE . . . . . INCHES	¼	½	¾



W-478.
FRESH AIR INLET.

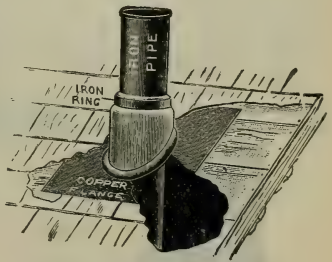
AYRES FRESH AIR INLETS.—W-478.

Always fresh air inlets.
Never foul air outlets.

ACME ROOF FLANGES.—W-480.

Made flat, 15°, 30° and 45°. With 30° and 45° at hand a fit can be made on any angle of roof from 25° to 57½°.

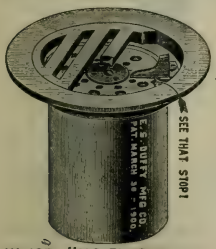
☞In ordering, state whether for Standard or Extra Heavy Pipe.



W-480. ACME ROOF FLANGE.

SIZE . . . . . INCHES	4	6
FOR SOIL PIPE . . . INCHES	4–5–6	7–8–10
EACH	8.00	16.00

SIZE . . . . . INCHES	2	3	4	5	6
COPPER . . . EACH	1.35	1.45	1.50	2.00	2.40
GALV'D IRON . . EACH	1.15	1.15	1.15	1.50	1.75



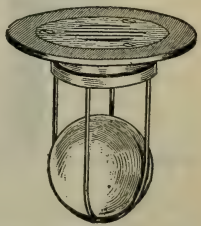
W-485. "NO FLUD" BACK WATER STOP.

"NO FLUD" BACK WATER STOP.—W-485.

Stops the water backing up through basement and area drains and allows outflow of any water accumulated on floor by opening the slide valve.

McCANN SEWER TRAPS.—W-488.

Prevents the flooding of Cellars from the backing up of water through the basement or area drains.



W-488. McCANN SEWER TRAP.

DEPTH, 6 INCHES. FITS SOIL PIPE, 4 OR 6 INCHES.	
EACH	3.00

SIZE . . . . . INCHES	4	6
FOR TILE PIPE . . . . . EACH	2.75	5.25
FOR IRON PIPE . . . . . EACH	3.25	5.75



W-505.
S TRAP.



W-507.
THREE-QUARTER S TRAP.



W-509.
HALF S OR P TRAP.



W-511.
RUNNING TRAP.



W-514.
BAG TRAP.

LEAD TRAPS.

WEIGHT	Standard.					Extra Heavy.				
SIZE . . . . . INCHES	1¼	1½	2	3	4	1¼	1½	2	3	4
W-505. S TRAP . . . . . EACH	.58	.90	1.38	2.69	3.25	.87	1.25	1.85	3.09	4.30
W-507. THREE-QUARTER S TRAP . . . . . EACH	.55	.81	1.30	2.62	3.07	.81	1.15	1.73	2.97	3.95
W-509. P TRAP . . . . . EACH	.51	.75	1.20	2.24	2.49	.77	1.09	1.57	2.58	3.25
W-511. RUNNING TRAP . . . . . EACH	.48	.72	1.13	2.09	2.53	.70	1.03	1.46	2.35	3.28
W-514. BAG TRAP . . . . . EACH	.68	1.08	1.73	3.35	4.77	1.06	1.54	2.33	3.96	6.30



W-520. LONG OUTLET S TRAP.



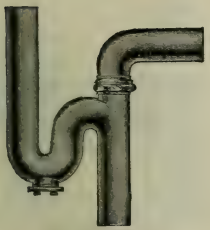
W-522. LONG OUTLET HALF S TRAP.



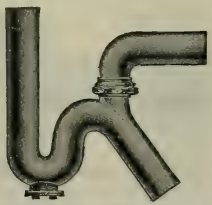
W-523. LONG INLET S TRAP.

LEAD TRAPS.

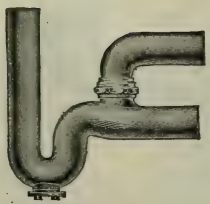
WEIGHT	Standard.			Extra Heavy.		
SIZE . . . . . INCHES	1¼	1½	2	1¼	1½	2
W-520. LONG OUTLET S TRAP . . . . . EACH	.93	1.36	2.00	1.44	1.95	2.69
W-522. LONG OUTLET HALF S TRAP . . . . . EACH	.76	1.02	1.55	1.14	1.50	2.02
W-523. LONG INLET S TRAP . . . . . EACH	.93	1.36	2.00	1.44	1.95	2.69



W-530. S TRAP



W-532. THREE-QUARTER S TRAP.



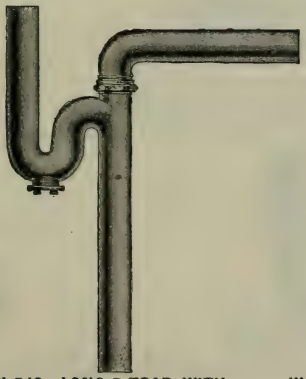
W-534. HALF S OR P TRAP.

LEAD TRAPS, WITH ROUGH BRASS VENTS.

WEIGHT	Standard			Extra Heavy		
SIZE . . . . . INCHES	1¼	1½	2	1¼	1½	2
W-530. VENTED S TRAP . . . . . EACH	1.38	1.85	2.33	1.67	2.20	2.80
W-532. VENTED THREE-QUARTER S TRAP . . . . . EACH	1.35	1.76	2.25	1.61	2.20	2.68
W-534. VENTED P TRAP . . . . . EACH	1.31	1.70	2.15	2.04	2.52	2.82



W-540. LONG S TRAP, WITH BRASS VENT.



W-542. LONG S TRAP, WITH EXTENDED LEAD VENT.



W-544. CONBINATION NIPPLE.

WEIGHT	Standard			Extra Heavy		
SIZE . . . . . INCHES	1¼	1½	2	1¼	1½	2
W-540. VENTED LONG S TRAP . . . . . EACH	1.73	2.31	3.25	2.24	2 90	3.94
W-542. EXTENDED VENT S TRAP . . . . . EACH	2.03	2.61	3.55	2.50	3.20	4.24

COMBINATION SOLDERING NIPPLES.—W-544.

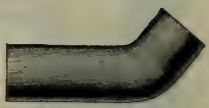
LENGTH . . . . . INCHES	4	6	8	10	12	14	16	18	20	24
1¼-INCH . . . . . EACH	.39	.44	.52	.58	.63	.73	.78	.83	.90	1.00
1½-INCH . . . . . EACH	.48	.60	.66	.74	.80	.93	1.00	1.07	1.15	1.30
2 -INCH . . . . . EACH	.72	.86	.96	1.08	1.17	1.37	1.47	1.56	1.68	1.87
4 -INCH . . . . . EACH	1.63	1.95	2.13	2.36	2.53	2.93	3.10	3.27	3.45	3.80



W-555. SHORT BEND.



W-557. SHORT BEND, EXTENDED.



W-559. 45° BEND.

SHORT LEAD BENDS.

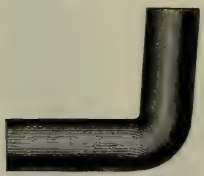
WEIGHT	Standard					Extra Heavy				
SIZE . . . . . INCHES	1¼	1½	2	3	4	1¼	1½	2	3	4
W-555 . . . . . EACH	.25	.38	.57	1.09	1.50	.34	.62	.80	1.21	1.84
CENTER TO ENDS . . . . . INCHES	6x3½	7x4	7¾x3¾	8¼x4¼	10x5½	6x3½	7x4	7¾x3¾	8¼x4¼	10x5½

SHORT LEAD BENDS, EXTENDED.

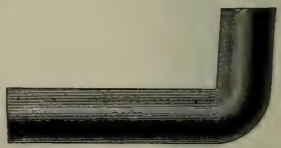
WEIGHT	Standard					Extra Heavy				
SIZE . . . . . INCHES	1¼	1½	2	3	4	1¼	1½	2	3	4
EXTENDED LENGTH . . . . . INCHES	12	12	12	12	12	12	12	12	12	12
W-557 . . . . . EACH	.44	.56	.79	1.39	1.70	.60	.90	1.08	1.57	2.09
EXTRA LONG, EXTENDED LENGTH . . . . INCHES	15	15	15	15	15	15	15	15	15	15
W-557 . . . . . EACH	.47	.67	.94	1.65	2.00	.72	1.07	1.28	1.87	2.45

We can furnish these Bends either 18 or 20 inches long.

W-559. 45° Lead Bends, 4x10 inches, $1.45; 4x12 inches, $1.75.



W-565. LONG BEND.



W-567. LONG BEND, EXTENDED.

LONG LEAD BENDS

WEIGHT	Standard					Extra Heavy				
SIZE . . . . . INCHES	1¼	1½	2	3	4	1¼	1½	2	3	4
W-565 . . . . . EACH	.30	.50	.78	1.39	1.95	.50	.79	1.05	1.60	2.40
CENTER TO ENDS . . . . . INCHES	6	7	7¾	8¼	10	6	7	7¾	8¼	10

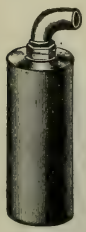
LONG LEAD BENDS, EXTENDED.

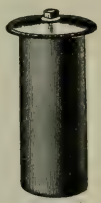
WEIGHT	Standard					Extra Heavy				
SIZE . . . . . INCHES	1¼	1½	2	3	4	1¼	1½	2	3	4
EXTENDED LENGTH . . . . . INCHES	12	12	12	12	12	12	12	12	12	12
W-567 . . . . . EACH	.46	.67	.99	1.73	2.15	.70	1.07	1.35	1.96	2.62

We can furnish these Bends 15, 18, or 20 inches long.


W-575.


W-577.


W-579.

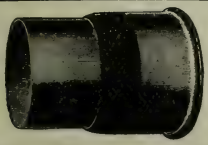

W-581.

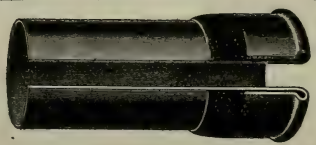

W-583.


W-585.

DRUM TRAPS WITH BRASS TRAP SCREWS.
DIAMETER 4 INCHES, LENGTH 9 INCHES.

FIGURE	W-575	W-577	W-579	W-581	W-583	W-585
WITH BRASS TRAP SCREW . . . . . EACH	1.80	2.45	2.75	2.15	2.80	3.10
WITH NICKEL PLATED TRAP SCREW . . . . . EACH	2.05	2.85	3.30	2.45	3.30	3.75

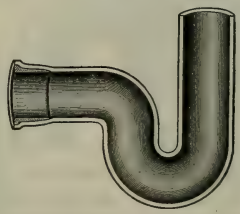

W-590. COMBINATION FERRULE.


W-592. SECTIONAL LONG FERRULE.

COMBINATION (LEAD AND IRON) FERRULES.

LENGTH . . . . . INCHES	4	6	8	10	12	20	24
1¼ X 2-INCH . . . . . EACH	---	.43	.51	.60	.67	.95	1.10
2-INCH . . . . . EACH	.28	.46	.57	.67	.76	1.00	1.15
3-INCH . . . . . EACH	.42	.67	.82	.98	1.10	1.40	1.60
4-INCH . . . . . EACH	.50	.85	1.00	1.25	1.40	2.10	2.30


W-595. COMBINATION BEND AND FERRULE.

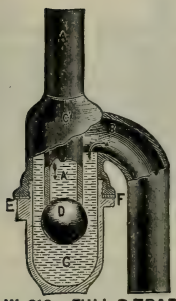

W-597. COMBINATION P TRAP AND FERRULE.

4-INCH COMBINATION BEND AND FERRULE.—W-595.

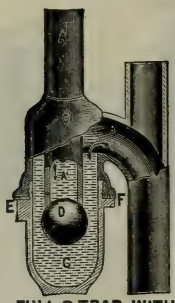
LENGTH, OUTLET END . . . . . INCHES	12, or less	13, 14, 15	16, 17, 18	19, 20
5⅝-INCH INLET . . . . . EACH	2.20	2.50	2.80	2.98
9⅝-INCH INLET . . . . . EACH	2.65	2.94	3.23	3.42

4-INCH P TRAP AND FERRULE.—W-597.

LENGTH . . . . . INCHES	13	14	15	16	17	18	19	20	21	22
EACH	3.12	3.25	3.37	3.50	3.62	3.75	3.87	4.00	4.12	4.25



W-610. FULL S TRAP.



W-612. FULL S TRAP, WITH VENT.



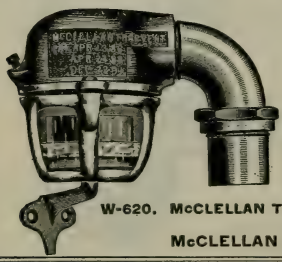
W-614. HALF S TRAP.

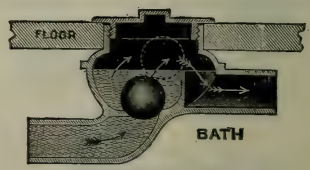
BOWER TRAPS, LEAD BODY, WITH BRASS SCREW FOR CUP.

STYLE	S		Half S		Running		S, with Vent		Half S, with Vent	
SIZE INCHES	1½	1¼	1½	1¼	1½	1¼	1½	1¼	1½	1¼
GLASS CUP EACH	1.50	1.90	1.45	1.80	1.55	1.90	2.30	2.90	2.05	2.55
LEAD CUP EACH	1.70	2.15	1.65	2.05	1.75	2.15	2.50	3.20	2.25	2.80
BRASS CUP EACH	1.90	2.40	1.85	2.30	1.95	2.40	2.70	3.40	2.45	3.50
BRASS CUP, NICKEL PLATED EACH	2.05	2.60	2.00	2.50	2.10	2.60	2.85	3.55	2.60	3.65

EXTRA PARTS FOR BOWER TRAPS.

PART	Glass Cup	Lead Cup	Brass Cup	N. P. Cups	Balls	Gaskets
1¼-INCH TRAP EACH	.25	.60	1.00	1.10	.20	.10
1½-INCH TRAP EACH	.40	.75	1.25	1.35	.30	.15


W-620. McCLELLAN TRAP VENT.



W-622. CUDELL BATH TRAP.

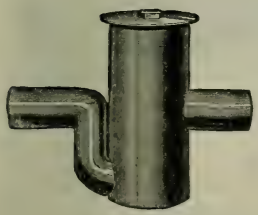
McCLELLAN ANTI-SIPHON TRAP VENTS.—W-620.

SIZE INCHES	1½	2
PLAIN IRON, COMPLETE, WITH MERCURY	2.70	4.10
NICKEL PLATED	5.50	8.25

CUDELL TRAPS.—W-622.

STYLE	No Vent	Vented
LEAD BODY, HARD METAL DOME, INLET 1¼-INCH, OUTLET 1¼-INCH EACH	1.25	1.50
LEAD BODY, HARD METAL DOME, INLET 1½-INCH, OUTLET 1¼-INCH EACH	1.25	1.50
LEAD BODY, HARD METAL DOME, INLET 1½-INCH, OUTLET 2-INCH EACH	1.35	1.60

CLEAN-SWEEP ROUGH BRASS AND LEAD TRAPS.



W-635.
RUNNING TRAP.



W-637.
RUNNING TRAP, VENTED.



W-639.
FULL S TRAP.

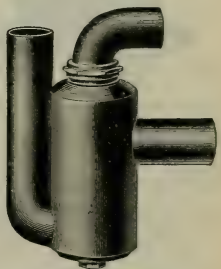
SIZE . . . . . INCHES	1¼	1½	2
W-635. LEAD BODY, NICKEL PLATED TRAP SCREW . . . . . EACH	1.00	1.30	----
W-635. ROUGH BRASS BODY, NICKEL PLATED TRAP SCREW . . EACH	2.30	3.00	----
W-637. LEAD BODY, NICKEL PLATED TOP AND VENT . . . . . EACH	1.50	1.80	----
W-637. ROUGH BRASS BODY, NICKEL PLATED TOP AND VENT . . EACH	2.80	3.50	----
W-637. LEAD BODY, ROUGH BRASS VENT . . . . . EACH	1.25	1.45	----
W-639. LEAD . . . . . EACH	.80	.95	1.50
W-639. ROUGH BRASS . . . . . EACH	1.80	2.75	----



W-645.
HALF S TRAP.



W-647.
FULL S TRAP, VENTED.



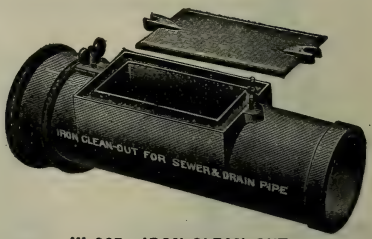
W-649.
HALF S TRAP, VENTED.

SIZE . . . . . INCHES	1¼	1½	2
W-645. LEAD . . . . . EACH	.75	.90	1.30
W-645. ROUGH BRASS . . . . . EACH	1.60	2.50	----
W-647. LEAD . . . . . EACH	1.20	1.35	2.00
W-647. ROUGH BRASS . . . . . EACH	2.20	3.15	----
W-649. LEAD . . . . . EACH	1.15	1.30	1.80
W-649. ROUGH BRASS . . . . . EACH	2.00	3.00	----

In ordering, give size, figure number, and whether Lead or Brass.



W-660. IRON SEWER TRAP.



W-665. IRON CLEAN-OUT FOR SEWER AND DRAIN PIPE.

IRON SEWER TRAPS AND CLEAN-OUTS.

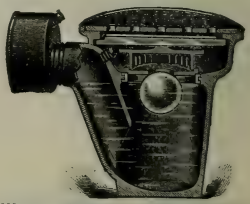
SIZE . . . . . INCHES	2	3	4	5	6	8	9	10
W-660. FOR IRON SOIL-PIPE . . . . . EACH	----	----	11.00	14.00	15.00	50.00	-----	75.00
W-660. FOR SEWER PIPE . . . . . EACH	----	----	-----	-----	15.00	-----	75.00	-----
W-665. FOR STANDARD SOIL-PIPE . . . EACH	1.00	1.35	1.75	2.75	3.75	-----	-----	-----
W-665. FOR EXTRA HEAVY SOIL-PIPE . EACH	1.50	2.50	3.50	5.00	6.00	10.00	-----	15.00



W-670. BRASS SEWER VALVE.



*W-672. PALMER VALVE.



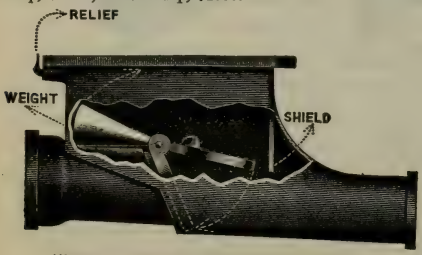
W-675. MARTIN CELLAR TRAP.

SIZE . . . . . INCHES	3	4	5	6	8
W-670 . . . . . EACH	1.20	1.60	2.00	2.40	3.20
W-672 . . . . . EACH	6.50	7.50	9.00	10.00	15.00

*W-672. Extension pieces 24 inches long for 2-inch Trap, $2.00; 4-inch Trap, $3.00; 6-inch Trap, $4.00.

NUMBER	1	2
FOR STORE BLDGS. . EACH	15.00	-----
FOR SMALL CELLARS . EACH	-----	15.00

A Hand Hole, Bell Trap, Cesspool and Back-water Trap combined. Allows free outflow of water and prevents back-water inflow from sewer. 4-inch Soil Pipe Inlet or 2-inch Iron Pipe Inlet.

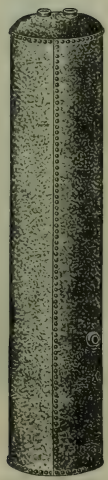


W-680. MARSH BACK WATER VALVE.

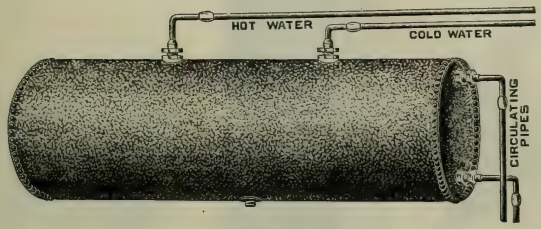
MARSH BACK WATER VALVES.—W-680.

SIZE . . . . . INCHES	4	6	8	9
FOR SOIL PIPE . . . . . EACH	11.00	16.00	30.00	39.00
EACH THREADED END, ADD . NET	1.00	1.25	1.50	1.75
LENGTH, END TO END . . INCHES	21	24	29	31
HEIGHT, FROM CENTER OF HUB . IN.	7½	10	10¾	12¼
SIZE OF MANHOLE . . . INCHES	6x10	7x13	9x5	10x18

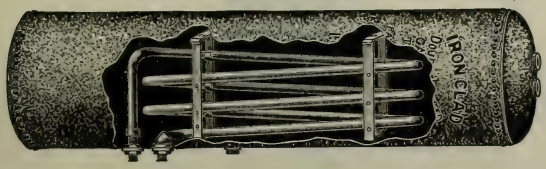
RANGE BOILERS.



W-700. STANDARD RANGE BOILER.



W-702. HORIZONTAL BOILER.



W-704. HORIZONTAL BOILER WITH COIL, BOTTOM CONNECTIONS.



W-706. STANDARD BOILER WITH COIL.

STANDARD RANGE BOILERS.—W-700.

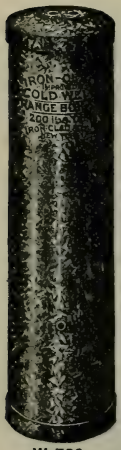
CAPACITY . . . . GALLONS	18	21	24	27	28	30	32	35	36	40	42	47	48
DIAMETER . . . . . INCHES	12	12	14	12	14	12	14	13	14	14	16	16	14
HEIGHT . . . . . FEET	3	3½	3	4½	3½	5	4	5	4½	5	4	4½	6
EACH	14.50	15.50	19.00	18.50	20.25	19.00	21.00	21.00	21.50	24.00	26.00	30.00	30.00
AVERAGE WEIGHT . POUNDS	47	49	57	66	66	72	72	76	112	85	95	102	102
CAPACITY . . . . GALLONS	52	53	63	66	79	82	98	100	120	120	144	168	192
DIAMETER . . . . . INCHES	16	18	16	18	18	20	20	22	22	24	24	24	24
HEIGHT . . . . . FEET	5	4	6	5	6	5	6	5	6	5	6	7	8
EACH	31.00	31.50	38.00	38.00	44.00	45.50	61.50	63.50	74.00	72.50	103 00	120.00	132.00
AVERAGE WEIGHT . POUNDS	119	119	146	150	171	192	210	220	265	265	332	348	391

W-702 same price as W-700.

ONE INCH GALVANIZED COILS FOR STANDARD RANGE BOILERS.

CAPACITY OF BOILER . . . . . GALLONS	30	40	52	63	66	79	82	100	120	144	192
DIAMETER . . . . . INCHES	12	14	16	16	18	18	20	22	24	24	24
COILS . . . . . EACH	10.50	12.00	16.00	16.00	18 00	18.00	21.00	25.00	30.00	30.00	30.00

To obtain price on a coil boiler, add net price of coil to net price of boiler.
Horizontal boilers with coil, having top inlet, can be furnished at same price as W-704.
See page 786 for Brass Boiler Couplings. Page 97 for Iron Boiler Couplings.



W-720.
STANDARD.



Label on
Extra Heavy.
Working Pressure,
200 Lbs.



W-721.
EXTRA HEAVY.



Label on
Double Extra Heavy.
Working Pressure,
250 Lbs.



W-722.
DOUBLE
EXTRA HEAVY.

COLD-WELD BOILERS.—W-720, W-721 and W-722.

CAPACITY . . . . . GALLONS	18	21	24	24	27	28	30	32	35	-----
DIAMETER . . . . . INCHES	12	12	12	14	12	14	12	14	13	-----
HEIGHT . . . . . INCHES	36	42	48	36	54	42	60	48	60	-----
STANDARD, 200 LBS. TEST . . . . . EACH	14.50	15.50	15.75	19.00	18.50	20.25	19.00	21.00	21.00	-----
EXTRA HEAVY, 250 LBS. TEST . . . . . EACH	-----	-----	15.75	19.00	18.50	-----	19.00	-----	21.00	-----
DOUBLE EXTRA HEAVY, 300 LBS. TEST . . EACH	-----	-----	15.75	-----	-----	-----	19.00	-----	21.00	-----
CAPACITY . . . . . GALLONS	36	40	42	47	-----	52	53	-----	66	-----
DIAMETER . . . . . INCHES	14	14	16	16	-----	16	18	-----	18	-----
HEIGHT . . . . . INCHES	54	60	48	54	-----	60	48	-----	60	-----
STANDARD, 200 LBS. TEST . . . . . EACH	21.50	24.00	26.00	30.00	-----	31.00	31.50	-----	38.00	-----
EXTRA HEAVY, 250 LBS. TEST . . . . . EACH	-----	24.00	26.00	-----	-----	31.00	-----	-----	38.00	-----
DOUBLE EXTRA HEAVY, 300 LBS. TEST . . EACH	-----	24.00	-----	-----	-----	31.00	-----	-----	-----	-----



W-724. HORIZONTAL COLD-WELD.

Horizontal Cold-Weld Boilers, same list as above—tapped as shown, or special to order.

Brazing Tanks tested 200 lbs.; working pressure, 150 lbs.

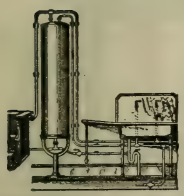


W-726. BRAZING TANK.

BRAZING TANKS.—W-726.

CAPACITY . . . . . GALLONS	4	5	6	7½	10	12	15
DIAMETER AND LENGTH . . . . . INCHES	9 x 15	9 x 18	10 x 16	12 x 18	12 x 20	12 x 24	12 x 30
PRICE, GALVANIZED . . . . . EACH	6.00	6.25	6.50	7.50	8.00	8.50	10.00

Owing to variation in the location and size of the openings required in Brazing Tanks, we make them to order only.



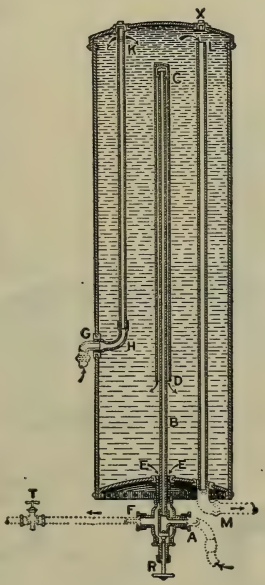
OLD WAY OF CONNECTING TO GAS RANGE.

With extra pipe to top of Boiler in order to supply hot water at once without heating entire contents of Boiler.

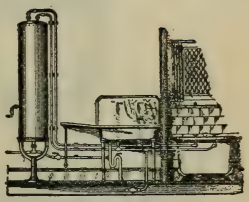


BROOKS BOILER CONNECTED TO GAS RANGE.

No extra pipe needed. Hot water right away, always, by the Brooks method.

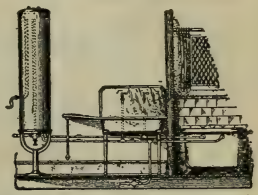


W-730.



THE OLD WAY.

Showing pipes on wall and service pipes connected to sewer.



THE NEW WAY (BROOKS SYSTEM).

Showing pipes inside of Boiler. No connection to sewer needed.

THE BROOKS RANGE BOILER AND VALVE.

PATENTED.

CA[illegible]TY 30 GALLONS . . . . . EACH	20.00	CAPACITY, 40 GALLONS . . . . . EACH	25.00

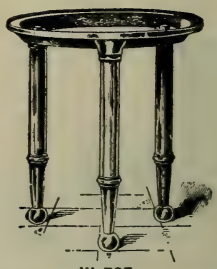
[illegible]OOKS SYSTEM is a new method of connecting and piping Range Boilers. Its chief advantage is that hot water can be drawn in a very few moments after a fire is lighted, owing to the inside arrangement and method of circulation, controlled by a specially constructed Valve. Cold water enters Boiler through Valve at (A) and passes up through the pipe at (B) to the top of the Boiler where, at (C), the direction of the flow is reversed by a casing or outer pipe and the water flows down and out into the Boiler at (D). At (E) it leaves the Boiler, flowing through the Valve into the pipe (F), through the water back where it becomes hot, returning to the Boiler at (G). Here it enters, passes in and up, through the pipe (G H K), to the top of the Boiler. Entering at (K), and being naturally deflected toward the other side by the top, which it strikes, it finds immediate outlet at (L), whence it passes downward and out, at (M), for use. Hot water may be taken off at X instead of at M, if more convenient.

[illegible]O DRAIN BOILER. To drain the Boiler, shut off the supply, open the Valve at (R) and loosen a plug at top of Boiler. Then open any cold water faucet below the Boiler. in a basement laundry, for instance, and all water will drain out through the [illegible]ened faucet.

DRAIN THE PIPES. When the water is shut off in the ground, all pipes will drain, the Boiler remaining nearly full. In shu[illegible]ng off water, the waste is, of course, opened. Then open a faucet, as usual, and the water will siphon from all pipes unti[illegible] stands on a level with the top of supply to Boiler, at (C).



W-735.
BOILER STAND.



W-737.
NICKEL PLATED BRASS STAND.

BOILER STANDS.—W-735.

DIAMETER OF RING . . . . . INCHES	12	13	14	16	18	20	22	24
FOR BOILERS . . . . CAPACITY, GALLONS	18 to 30	35	40	52 and 63	66	82	100 to 120	120 to 192
PLAIN . . . . . EACH	1.25	1.35	1.40	1.85	2.00	2.25	2.75	3.50
GALVANIZED . . . . . EACH	2.50	2.60	2.70	3.25	3.80	4.50	5.00	6 50
HEIGHT, FLOOR TO TOP . . . INCHES	21	21	20	19	22	23	24	24

W-737. Nickel Plated Brass Boiler Stand, 12 to 16-inch Ring, $7.50; 18 to 24-inch Ring, $9.00.



W-748. WILHELMI
COPPER BOILER.



W-740.
SHORT PATTERN
STAND.

Same list price as regular Stand, W-735. These Stands are 6 inches shorter than regular.



W-742.
WROUGHT IRON
HANGER.

12-inch, per pair,	$6.50
14-inch, per pair,	6.80
16-inch, per pair,	7.00
18-inch, per pair,	7.50
20-inch, per pair,	8.00



W-744.
WROUGHT IRON
BRACKET.

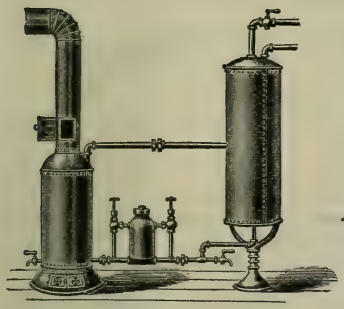
12-inch, per pair,	$11.00
14-inch, per pair,	11.50
16-inch, per pair,	12.50
18-inch, per pair,	13.50
20-inch, per pair,	19.00

Larger sizes made to order.

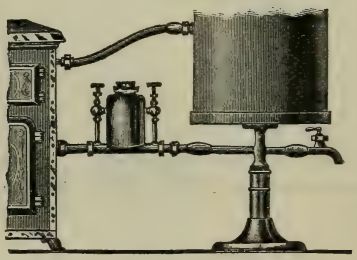
WILHELMI PATENT SAFETY COPPER BOILERS.—W-748.

The 250-lb. test Boiler is guaranteed to stand a working pressure of 150 lbs. and against collapse.
The 150-lb. test Boiler is guaranteed to stand a working pressure of 100 lbs. and against collapse.

CAPACITY . . . . . GALLONS	30	35	40	50	60
DIAMETER . . . . . INCHES	12	13	14	16	18
PRICE, 250-LB. TEST . . . . . EACH	30.00	35.00	40.00	50.00	60.00
PRICE, 150-LB. TEST . . . . . EACH	26.00	30.00	34.00	44.00	55.00
BOXING, EXTRA . . . . . NET	1.00	1.00	1.00	1.00	2.00



W-760. CONNECTED TO HEATER.



W-762. CONNECTED TO RANGE.

DEHN'S PATENT AUTOMATIC FEED WATER-BACK, BOILER AND HEATER CLEANERS.

These Cleaners are designed to prevent the accumulation of lime, magnesia, and similar deposits in Water-Backs, Heaters and Boilers, and are being used extensively in Hotels, Restaurants, Hospitals, Barber Shops, Laundries, Residences, etc. They will successfully remove deposits already accumulated.

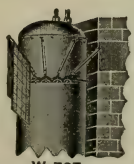
SIZE . . . . . INCHES	¾	1	1¼	1½
FOR IRON PIPE . . . . . EACH	10.00	13.00	15.00	17.00

Compound, per pound, 15 cents.
Special Catalogue upon application.



W-765.

Champion Air Vent. Sectional view, full size.
Nickel Plated, each, $1.75



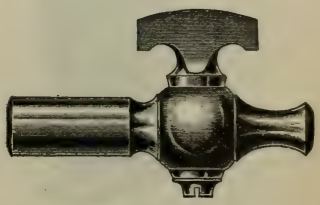
W-767.

Boiler Towel Rack. Fits any Range Boiler.
Each 40



W-769.

Safety Water Cushion. For preventing water hammer.
Finished Brass, each, ... $5.00



W-772.

Air Cock for Lead Pipe.
Finished Brass, each 50

STABLE FIXTURES.



Y-25. HARNESS BRACKET.

	Jap'd.	Galv.
Projecting 10 inches .	$1.25	$1.75



Y-27. HARNESS BRACKET.

	Jap'd.	Galv.
Wood Capped. Each .	$1.00	$1.25
Rubber Capped. Each .	1.50	1.75



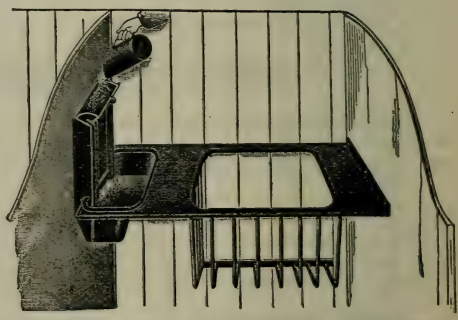
Y-30. SADDLE AND BRIDLE BRACKET.

	Jap'd.	Galv.
Projecting 14 inches .	$1.25	$2.25



Y-32. ECONOMY FEED BOX.

Adjustable for all kinds of grain, so that the animal eats steadily and gets the benefit of every grain. Each, $3.50
Write for circular.



Y-34. ECONOMY FEED BOX WITH HAY SPACE.

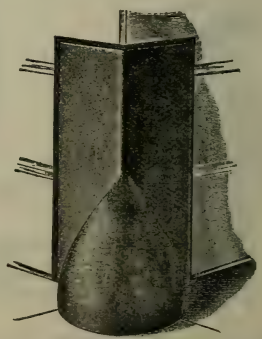
Made for either right or left hand and for single or double stalls. Price upon application.



Y-40. FEED CUT-OFF.

Size 4½x4 inches and 14 inches between slides. Capacity, 4 quarts.

	Painted.	Galv.
Each, ...	$4.50	$6.00



Y-42. WHEEL GUARD FOR CORNER.

Height, 34 inches. Price, . . . per pair, $30.00

CLOW TELEGRAPH CIPHER.

NUMBER OF PIECES OR FIGURE REQUIRED.

NUMBER OF ORDER.

WEIGHT OF CAST-IRON PIPE PER FOOT.

1 Mab.	34 Mend.	67 Moist.	100 Myrtle.
2 Mac.	35 Mense.	68 Mold.	150 Nab.
3 Mad.	36 Ment.	69 Mole.	200 Nice.
4 Mag.	37 Mere.	70 Monde.	250 Nut.
5 Mail.	38 Merl.	71 Monk.	300 Obey.
6 Maid.	39 Mesh.	72 Mont.	350 Old.
7 Main.	40 Met.	73 Mop.	400 Pad.
8 Make.	41 Mew.	74 Moral.	450 Pin.
9 Man.	42 Mice.	75 More.	500 Quad.
10 Manks.	43 Mid.	76 Morn.	550 Quote.
11 Manor.	44 Midge.	77 Morris.	600 Rapid.
12 Many.	45 Midst.	78 Morse.	650 Row.
13 Mar.	46 Might.	79 Most.	700 Sad.
14 March.	47 Mild.	80 Mot.	750 Scot.
15 Mars.	48 Mile.	81 Moth.	800 Tap.
16 Marks.	49 Milk.	82 Mould.	850 Try.
17 Marl.	50 Mince.	83 Mount.	900 Ugly.
18 Marsh.	51 Mingle.	84 Mouth.	950 Urn.
19 Mart.	52 Mind.	85 Move.	1000 Vast.
20 Mask.	53 Minor.	86 Mow.	1100 Vase.
21 Mast.	54 Mint.	87 Much.	1200 Wake.
22 Mat.	55 Mire.	88 Mud.	1300 Walk.
23 Match.	56 Mirk.	89 Muff.	1400 Ward.
24 Math.	57 Mirth.	90 Mufti.	1500 Wash.
25 Mate.	58 Miss.	91 Mulct.	1600 Watch.
26 Maul.	59 Mite.	92 Mull.	1700 Wealth.
27 May.	60 Mix.	93 Mump.	1800 Wear.
28 Maze.	61 Mizzen.	94 Mural.	1900 Yard.
29 Mead.	62 Moat.	95 Muse.	2000 Yarn.
30 Meal.	63 Mob.	96 Mush.	3000 Yoke.
31 Mean.	64 Mock.	97 Musk.	4000 Youth.
32 Meat.	65 Mode.	98 Mute.	5000 Young.
33 Melt.	66 Moil.	99 Mystic.	

CAST-IRON PIPE.

Size, Inches.	Tarred Water Pipe.	Untarred Gas Pipe.	Tarred Culvert Pipe.
2	Arkansas	Akron.	
3	California	Baldwin.	
4	Dakota	Dover.	
6	Delaware	Easton.	
8	Florida	Fremont.	
10	Georgia	Geneva.	
12	Illinois	Hartford	Hammond.
14	Indiana	Keystone	Kankakee.
16	Iowa	Lansing	Lacon.
18	Maryland	Marion	Marshall.
20	Michigan	Norfolk	Naples.
24	Montana	Oakland	Oakley.
30	Oregon	Pontiac	Pekin.
36	Virginia	Rutland	Ripley.
42	Wyoming	Seneca	Seward.
48	Wisconsin	Tucson	Topeka.
60	Utah	Ulster	Utopia.

NUMBER OF FEET.

100 Asia.	1500 Jersey.	8000 Russia.
200 Belgium.	2000 Kentucky.	9000 Spain.
300 Chili.	2500 Kansas.	10000 Texas.
400 Denmark.	3000 Liberia.	15000 Uruguay.
500 Egypt.	3500 Lapland.	20000 Valparaiso.
600 France.	4000 Maine.	25000 Washington.
700 Germany.	4500 Mexico.	30000 Xenia.
800 Holland.	5000 Nevada.	40000 Yorkville.
900 Ireland.	6000 Ohio.	50000 Zanesville.
1000 Japan.	7000 Peru.	

SIZE REQUIRED.

EITHER WEIGHT, DIAMETER, LENGTH, WIDTH, OR DEPTH.

1/8 Taylor.	2½ Tunis.	10 Wagner.	24 Warsaw.
⅛ Temple.	3 Turner.	11 Wallet.	30 Webster.
¼ Tiffin.	3½ Undine.	12 Walker.	36 Weldon.
⅜ Toledo.	4 Union.	13 Wallow.	42 Weapon.
½ Toronto.	4½ Urbana.	14 Wallace.	48 Wesley.
⅝ Tower.	5 Valley.	15 Waltz.	54 Wedlock.
¾ Tracy.	5½ Velvet.	16 Wander.	60 Welcome.
⅞ Tremont.	6 Venice.	17 Warble.	72 Whisper.
1 Trenton.	7 Vernon.	18 Walton.	84 Wicket.
1¼ Trimble.	8 Wabash.	19 Warrior.	96 Wisdom.
1½ Trinidad.	9 Waiter.	20 Warren.	120 Wizard.
2 Trinity.			

GAS, STEAM, AND WATER PIPE.

Size, Inches.	Black.	Galvanized.
⅛	Allegheny.	
¼	Baltimore	Amazon.
⅜	Camden	Bay.
½	Detroit	Colorado
¾	Erie	Danube
1	Fairmont	Elbe.
1¼	Galena	Firth.
1½	Harrisburg	Ganges.
2	Ithaca	Hudson.
2½	Jamestown	Indus.
3	Kensington	Juniata.
3½	Lancaster	Kanawha.
4	Macon	Lake.
4½	Quincy	Miami.
5	Newark	Nile.
6	Oneida	Osage.
7	Paris	Po.
8	Reading	Rhine.
9	Salem	Seine.
10	Troy	Tweed.
12	Utica	Ural.
14	Verona.	
16	Wales.	

CLOW TELEGRAPH CIPHER.

DISCOUNT CIPHER.

To be used in quoting discounts. Also net prices on Cast-iron Pipe, when figures will represent dollars and cents per ton on Pipe, and cents per pound on specials.

Per Cent.		Per Cent.		Per Cent.	
1	Alligator.	27	Eland.	55	Otter.
2	Asp.	27½	Fox.	56	Paca.
2½	Alpaca.	28	Ferret.	57	Pig.
2½	Adder.	29	Fawn.	57½	Panther.
2¾	Ass.	30	Goat.	58	Porcupine.
3	Ant.	31	Gopher.	59	Puma.
4	Antelope.	32	Griffin.	60	Rat.
5	Ape.	33	Gazelle.	61	Raccoon.
6	Armadillo.	33½	Giraffe.	62	Reindeer.
7	Bat.	34	Gibbon.	62½	Rabbit.
7½	Bear.	35	Hare.	63	Seal.
8	Badger.	36	Hyena.	64	Steer.
9	Buck.	37	Horse.	65	Sheep.
10	Bison.	37½	Hog.	66	Scorpion.
11	Bull.	38	Hound.	67	Squirrel.
12	Calf.	39	Hippo.	67½	Snake.
12½	Camel.	40	Jackal.	68	Salamander.
13	Colt.	41	Jaguar.	69	Stag.
14	Cat.	42	Kangaroo.	70	Snail.
15	Chamois.	43	Leopard.	71	Tiger.
16	Chimpanzee.	44	Lynx.	72	Tapir.
17	Chameleon.	45	Lion.	72½	Turtle.
17½	Cony.	46	Lizard.	73	Tortoise.
18	Deer.	47	Lamb.	74	Viper.
19	Promedary.	47½	Mole.	75	Wolf.
20	Dragon.	48	Marmot.	76	Wombat.
21	Doe.	49	Monkey.	77	Weasel.
22	Dormouse.	50	Mouse.	77½	Walrus.
23	Donkey.	51	Mastiff.	78	Worm.
24	Dog.	52	Mastodon.	79	Yak.
25	Elk.	53	Ox.	80	Zebra.
26	Elephant.	54	Opossum.		

Per Cent.		Per Cent.	
Sable	and 2½.	**Unicorn**	and 7½ and 5.
Polecat	and 2½ and 5.	**Spaniel**	and 7½ and 10.
Cow	and 5.	**Crocodile**	and 10.
Gorilla	and 5 and 2½.	**Frog**	and 10 and 2½.
Mule	and 5 and 5.	**Ermine**	and 10 and 5.
Skunk	and 5 and 7½.	**Buffalo**	and 10 and 7½.
Coyote	and 5 and 10.	**Moose**	and 10 and 10.
Bear	and 7½.	**Beaver**	and 10 and 10 and 5.
Ibex	and 7½ and 2½.	**Civet**	and 10 and 10 and 10.

INQUIRIES.

Code Word.

DISCOUNTS.

Abase — At what discount will you sell us?
Abator — What discount for spot cash?

FREIGHT.

Abbey — What is best freight rate to our city?
Abduct — Shipment arrived. R. R. Co. demand freight. Did you prepay?

INSURANCE.

Abdicate — What is the insurance rate?
Abhor — How much shall we insure for?

MAKE.

Abet — How long will it take you to make?
Abide — Do you make?

MAIL.

Abject — Have you mailed specifications?

ORDERS.

Abolish — What is the number of your order?
Abortive — Shall we enter order?
Absent — Did you receive our order dated ——?
Abyss — Did you receive our order numbered ——?

Code Word.

INQUIRIES—CONCLUDED.

OFFERS AND OPTIONS.

Acid — Will you give us option on?
Accent — Is the option you gave us good yet?
Acute — How long will you hold offer open?

PRICES.

Adage — At what price can you furnish?
Adipose — At what price and how soon can you furnish?
Adonis — At what price can you buy?
Afar — Has there been any change in price of?
Agate — What is the prospect of prices on ——?

SHIPPING.

Alley — When can you ship?
Aloes — When will you ship our order dated ——?
Alpha — When will shipment go forward?
Amble — Shall we ship?
Amity — Shall we ship your order without waiting for the ——?
Amuck — Have you shipped us any?
Anchor — Have you shipped our order dated ——?
Angel — Can you ship promptly?
Anise — How soon after receipt of order could you ship ——?
Ankle — Does shipment check up correctly?
Anon — Why don't you accept shipment?
Antic — Have you ordered shipment returned?
Appal — Did you make direct shipment of?

STOCK.

Apron — Have you in stock and can you ship promptly?
Arbiter — How many have you in stock of?
Arctic — Can you buy for us from stock?

MISCELLANEOUS.

Argus — Can we substitute?
Argent — What is the Figure Number in our 1902 Catalog?
Armlet — Whose Catalog Figure Numbers are those in your specifications ——?
Aroma — Where is Bill of Lading?
Arson — Where is Foundry Slip?
Ashes — What is the prospect ——?
Asperse — Why don't you answer our letter dated ——?
Astral — Are you tracing?
Atom — Will you trace?
Attire — Is it necessary?
Awe — When will you send paper covering shipment ——?

INSTRUCTIONS AND INFORMATION.

ON ORDERS.

Babel — Add to order of —— inst.
Bacon — Order dated —— should read ——.
Bait — Hold order dated —— for additions.
Baize — Hold order dated —— for shipping directions.
Bald — Change routing of our order dated —— to ——.
Ban — Please send specifications on your order dated ——.
Bandit — You may fill order with ——.
Bang — Add to our order dated ——, if too late do not enter.
Banish — If not too late change our order of —— to read ——.
Bantam — Hold subject to our order ——.
Bark — If you have not shipped our order dated —— hold for instructions.
Baton — At the prices you quoted enter our order for ——.
Bay — Please specify quantity wanted.
Bead — Add to our order numbered ——.
Beast — Duplicate our order if at ——.
Beck — Cancel order unless you can ship by ——.
Bedeck — Give preference over all others to order numbered —.
Befog — Duplicate our order dated ——.

CLOW TELEGRAPH CIPHER.

INSTRUCTIONS AND INFORMATION.—CONTINUED.

ON ORDERS—CONCLUDED.

Code Word.	
Beggar	We expect to complete order in about ———
Belay	Is according to your order ———.
Belfry	We have cancelled your order of ———.
Berlin	Too late to cancel order, ——goods have gone——.
Bibber	We have no order.
Bigot	None of the goods you order are in stock.
Bind	Impossible to fill your order in the time specified.
Bishop	Our order number is ———.
Blade	Your order does not quite make a car load; with what shall we fill car?
Blaze	Your order is being executed now and cannot be cancelled.
Bleach	We have no orders from you for ———.
Blink	We cancel your order.
Bliss	If ordered at once by wire we could furnish.
Bloat	We decline to cancel order dated ———.

TELEGRAMS.

Block	Please explain fully by wire if possible; if not, by letter today.
Bloom	Telegraph us.
Blossom	Telegraph us at our expense, using our Cipher as far as possible. See Code on pages 821 to 824, 1902 Catalog.
Blot	Telegraph us by night dispatch.
Blow	Telegraph us by night dispatch at our expense.
Blubber	Telegraph shipping directions.
Blue	See our telegram of ———.
Bluff	If not satisfactory telegraph us at once.
Blunt	Your telegram not clear, please repeat.
Blur	Cannot make out one of the words in your telegram, counting from beginning it is the ———.
Blush	We have telegraphed R. R. Co. to deliver goods to—.
Boar	Will telegraph you ———.
Bobbin	Will telegraph you as soon as we can give definite answer.
Bodice	Your telegram received and understood.
Bold	Something seems to be omitted in your telegram, please send another.
Bolster	Your telegram not received in time.
Bomb	See our telegram of ———.

LETTERS.

Cab	Will await your letter.
Cactus	Will send particulars by letter.
Cadet	Will be governed by instructions in your letter dated ———
Calm	Have replied to your telegram by letter as we cannot fully cover the matter by wire.
Cameo	Your letter cannot be found, dated ———.
Cancer	Letter with full particulars mailed on ———.
Capon	Mentioned in your letter of ———.
Carbine	Too late to change destination per your letter of——
Carp	Your letter does not explain sufficiently.
Casino	Referring to your letter of ———.
Chaff	Must have answer to our letter by ———.
Chap	Your letter was not received in time.
Cherub	See our letter of ———.

ON SHIPMENT.

Daft	Ship what you have ready and balance as soon as possible.
Dagger	If you can ship immediately enter our order for——.
Dale	Suspend shipment on our order dated ———.
Damp	Hold for instructions if you have not shipped order dated ———.
Dandy	Use your judgment in selecting route.
Dapper	If not already shipped, cancel.
Dash	Return shipment, pay charges.

INSTRUCTIONS AND INFORMATION—CONTINUED.

ON SHIPMENT—CONTINUED.

Code Word.	
Davit	Return shipment, let charges follow.
Dawn	Please make direct shipment.
Dazzle	Ship in our name to ———.
Deafen	Ship direct to ———.
Dean	You may return shipment ———.
Debate	Do not return shipment.
Decay	Suspend shipment on our order dated ———.
Decamp	Shipping instructions go by mail.
Deck	Ship by express.
Declare	Ship by boat.
Decoct	Ship by rail.
Decoy	Ship by lake and rail.
Decree	Ship by express, C. O. D.
Deduce	Ship by freight, C. O. D.
Deepen	Ship via C., B. & Q. R. R.
Deface	Ship via C , R. I. & P. Ry.
Defect	Ship via C. & N.-W. Ry.
Defense	Ship via C., M. & St. P. Ry.
Deform	Ship via C. & A. Ry.
Defunct	Ship via Atchison, Topeka & Santa Fe R. R.
Defy	Ship via Lake Shore & Mich. So. Ry.
Degree	Ship via Michigan Central R. R.
Delaine	Ship via Wisconsin Central R. R.
Deluge	Ship via Illinois Central R. R.
Demolish	Ship via Chicago Great Western Ry.
Demon	Ship via Pittsburg, Ft. Wayne & Chicago R. R.
Depart	Ship via Chicago & Eastern Illinois Ry.
Derange	Ship via Chicago & Erie R. R.
Detest	Ship via C., C., C. & St. L. Ry.
Detract	Ship via Chicago & Grand Trunk Ry.
Develop	Ship via Great Western Ry.
Dicker	Ship via Great Northern Ry.
Dictate	Ship via Chicago, Indianapolis & Louisville Ry.
Dice	Ship via Louisville & Nashville R. R.
Digest	Ship via Northern Pacific R. R.
Disable	Ship via P., C., C. & St. L. Ry.
Disdain	Ship via Union Pacific Ry.
Disgrace	Ship via B. & O. R. R.
Disjoin	Ship via Goodrich Transp. Co.
Dismay	Ship via Graham & Morton Transp. Co.
Distil	Ship via Northern Michigan Transp. Co.
Diverge	Ship via Lake Mich. & Lake Superior Transp. Co.
Divorce	Ship via Western Transit Co.
Docket	Ship via Anchor Line.
Doff	Ship via Barry Line.
Domain	Ship via Lake Michigan Car Ferry Transp. Co.
Doom	Ship via Ward S. S. Line.
Drake	Ship via Munson Line.
Dress	Ship via Morgan Line.
Drub	Ship via Outside Steamers.
Dry	Please give shipping instructions.
Duck	Send tracer for shipment of ———.
Ducal	Ship order complete in one lot.
Duchy	If you can't ship in the time we specify advise by wire.
Dude	Unless you can ship at once, cancel order.
Duenna	Wanted at once, telegraph us when you can certainly ship.
Duet	We can safely promise shipment on ———.
Dulcet	We cannot promise definite date of shipment.
Dullard	We are making direct shipment.
Dummy	We will ship by fast freight and follow by wire tracer.
Dumping	We have in stock and can ship at once.
Dunce	We have in stock and can furnish ———.
Dungeon	We expect to ship on ———.
Dupe	We can ship part from stock and balance in ———.
Durance	We could ship today.
Duress	We can ship on———.
Dusky	We can ship on receipt of order.
Dust	We have already shipped.
Dutiful	We hope to be able to ship.
Dwarf	We cannot allow shipment to be returned———.

CLOW TELEGRAPH CIPHER.

INSTRUCTIONS AND INFORMATION—CONCLUDED.

ON SHIPMENT—CONCLUDED.

Code Word.	
Dwell	Shipment has arrived and is held subject to your order ———.
Dwindle	Shipment went forward ———.
Dye	Shipment will go forward ———
Dynamic	Shipment should arrive ———.
Dynasty	Amount of charges against the shipment are———.
Dynamo	Shipment checks out short ———.
Dyeport	Shipment checks out over ———.
Dypast	We will trace shipment of ———.
Dyranch	We are tracing shipment of ———.
Dysert	Cannot hold shipment in abeyance as goods are made.
Dytard	Cannot ship at present for lack of cars.
Dyvato	It is impossible to ship ———.

FREIGHT.

Earl	Contract Through Rate of freight and have inserted in Bill of Lading.
Ease	Name lowest rate of freight by rail.
Echo	Name lowest rate of freight by lake and rail.
Edify	Advise us of Initial and Car Number
Edit	Send Bill of Lading.
Educe	The rate of freight per 100 pounds, car lots, from mill to your city is———.
Egret	The rate of freight per 100 pounds, less than car lots, from mill to your city is———.
Elate	The rate of freight per 100 pounds, car lots, from Chicago to your city is———.
Elude	The rate of freight per 100 pounds, less than car lots, to your city is———.
Ember	Impossible to get through rate to ———.
Emigrate	Freight equalized with ———.
Encore	Freight allowed to destination.
Endow	R. R. Co will not guarantee rate.
Enlist	Freight rates will be advanced on ———.
Enrich	We prepaid freight on ———.
Envoy	Amount of freight we prepaid was———.
Epic	Ocean freight rate is———.
Equine	Lake and Rail freight rate is———.
Erudite	All Rail freight rate is———.
Escort	Less freight allowance per 100 pounds of———.

OFFERS, QUOTATIONS, OPTIONS.

Fabric	Will hold offer open until ———.
Fade	Offer is made for immediate acceptance.
Fay	We withdraw quotation of———.
Fairy	We withdraw offer of———.
Falcon	Quotations are based on order within———.
Fame	We quote on your specification dated———.
Fang	Your inquiry is not sufficiently specific for us to quote prices intelligently. Please particularize.
Fated	We cannot name prices until we hear from you in reply to our letter of———.
Fatten	We will figure on.
Fawn	We did not figure on.
Feast	———advanced to———.
Fed	———declined to———.
Feeble	We will guarantee.
Fester	We will not guarantee.
Fickle	We cannot find that.
Fig	It is impossible to.
Fight	Conditional upon strikes and accidents or causes beyond our control.
Fish	Prices include freight paid to———.
Fitful	Prices include freight paid to destination———.
Flag	As listed in our 1902 Catalog.
Flake	Price named is very best we can do.
Flash	Might be able to reduce price.
Fleet	For Car Load of not less than 24,000 pounds.
Flicker	For Car Load of not less than 30,000 pounds.

TERMS.

Gaff	Cash in advance.
Gang	Spot cash.
Gape	Cash on receipt of invoice.
Garlic	Cash on receipt of goods.
Gavel	Cash on receipt of Invoice and Bill of Lading.
Gaze	Draft at sight with Bill of Lading attached.
Genial	Net cash tenth of month following shipment.
Genus	Net cash, 30 days.
Germ	Net cash, 60 days.
Ghost	C. O. D. by express.
Giddy	C. O. D. by freight.
Gig	For cash 5 days from date of invoice——discount.
Gill	For cash 10 days from date of invoice——discount.
Gird	F. O. B. cars Chicago.
Glade	F. O. B. cars at your city.
Glitter	F. O. B. cars at mill.
Gloom	F. O. B. cars at mill with freight allowance, per 100 pounds of———.
Goblet	Terms and Conditions are special and apply to this order only.
Golf	Terms and Conditions are strictly confidential.
Gothic	Terms and Conditions can be made satisfactory.
Gopher	Cannot meet your wishes as to terms.

MISCELLANEOUS.

Hackle	R. R. Co. refuse to deliver for the reason that——.
Hail	We think you have misunderstood.
Hardy	Cannot figure the specifications without having plans.
Hake	Have no details.
Haggard	Explanation is received and is all right.
Hallow	Unless otherwise instructed.
Hamlet	In accordance with your instruction.
Hamper	On your specifications please describe more fully or send sketch of.
Hapless	Particulars go by mail.
Hankie	We need architect's specifications and plans in order to quote the prices intelligently.
Heal	Have paid charges and ordered goods returned.
Hearse	Have ordered goods returned and paid charges both ways.
Heath	Initial and Car Number is———.
Herald	Foundry slip number is———.
Hermit	Switching charges are———.
Hide	Demurrage charges are———.
Hilt	Custom duties are———.
Hive	Date and number of the manifest is———
Hoax	We need further instructions.
Hoof	Instructions not received in time.
Horde	We have received Invoice but no Bill of Lading of shipment of———.
Host	It is the fault of———.
Hovel	It was our fault.
Hornet	It was not our fault.
Hopple	We very much regret the delay but it was unavoidable.
Hostage	The delay is owing to———.
Homage	Goods are now being loaded.
Homely	We can furnish at———.
Honest	We cannot make———.
Honey	It is necessary.
Honor	It is not necessary.
Horrid	You have omitted———.
Huff	Was inadvertently omitted.
Hulk	We cannot promise.
Human	We will complete———.
Humble	We will try to complete———.
Hunch	We will mail Bill of Lading.
Hurdle	We are sending you papers covering shipment by—.
Hurtful	We will send you papers covering shipment of——
Husky	Goods will not be accepted unless they arrive here before———.
Hutch	We are entirely out of———.

USEFUL RULES AND INFORMATION.

STEAM.

A cubic inch of water evaporated under ordinary atmospheric pressure is converted into 1 cubic *foot* of steam (approximately).

The specific gravity of steam (at atmospheric pressure) is .411 that of air at 34° Fahrenheit, and .0006 that of water at the same temperature.

27,222 cubic feet of steam weigh 1 pound; 13,817 cubic feet of air weigh 1 pound.

Locomotives average a consumption of 3,000 gallons of water per 100 miles run.

The best designed boilers, well set, with good draft, and skillful firing, will evaporate from 7 to 10 lbs. of water per pound of first-class coal.

In calculating horse-power of Tubular or Flue Boilers, consider 15 square feet of heating surface equivalent to one *nominal* horse-power.

On one square foot of grate can be burned on an average from 10 to 12 lbs. of hard coal, or 18 to 20 lbs. soft coal, per hour, with natural draft. With forced draft nearly double these amounts can be burned.

Steam Engines, in economy, vary from 14 to 60 lbs. of feed water and from 1½ to 7 lbs. of coal per hour per indicated H. P. See table below for duty of high-grade engines.

Condensing Engines require from 20 to 30 gallons of water, at an average low temperature, to condense the steam represented by every gallon of water evaporated in the boilers supplying engines—approximately for most engines, we say, from 1 to 1½ gallons condensing water per minute per indicated horse-power.

Surface Condensers should have about 2 square feet of tube [cooling] surface per horse-power for a compound steam engine. Ordinary engines will require more surface according to their economy in the use of steam. It is absolutely necessary to place air pumps below condensers to get satisfactory results.

RATIO OF VACUUM TO TEMPERATURE (FAHRENHEIT) OF FEED WATER.

00 inches Vacuum,	212°	22½ inches Vacuum,	150°	28½ inches Vacuum,	92°
11 " "	190°	*25 " "	135°	29 " "	72°
18 " "	170°	27½ " "	112°	29½ " "	52°

*Usually considered the standard point of efficiency—Condenser and Air Pump being well proportioned.

WEIGHT AND COMPARATIVE FUEL VALUE OF WOOD.

1 cord Air-dried Hickory or Hard Maple weighs about 4500 lbs., and is equal to about 2000 lbs. coal.
1 " " White Oak weighs about 3850 lbs., and is equal to about 1715 lbs. coal.
1 " " Beech, Red Oak, or Black Oak, weighs about 3250 lbs., and is equal to about 1450 lbs. coal.
1 " " Poplar (whitewood), Chestnut, or Elm, weighs about 2350 lbs., and is equal to about 1050 lbs. coal.
1 " " Average Pine weighs about 2000 lbs., and is equal to about 925 lbs. coal.

From the above it is safe to assume that 2½ lbs. of dry wood is equal to 1 lb. average quality of soft coal, and that the full value of the same *weight* of different woods is very nearly the same—that is, a pound of hickory is worth no more for fuel than a pound of pine, assuming both to be dry. It is important that the wood be dry, as each 10 per cent. of water or moisture in wood will detract about 12 per cent. from its value as fuel.

DUTY OF STEAM ENGINES.

A well-known engineer of high authority gives the following comparative figures showing the economy of high-grade steam engines in actual practice:

Type of Engine.	Temperature of Feed Water.	Lbs. of Water Evaporated per lb. of Cumberland Coal.	Pounds of Steam per I. H. P. used per hour.	Pounds of Cumberland Coal used per I. H. P. per hour.	Cost per I. H. P. per hour, supposing Coal at $3.00 per ton.
Non-Condensing,	210°	10.5	29.	2.75	$0.0073
Condensing,	100°	9.4	20.	2.12	0.0056
Compound Jacketed,	100°	9.4	17.	1.81	0.0045
Triple Expansion Jacketed,	100°	9.4	13.6	1.44	0.0036

*** The effect of a good condenser and air pump should be to make available about 10 lbs. more mean effective pressure, with the same terminal pressure; or to give the same mean effective pressure with a correspondingly less terminal pressure. When the load on the engine requires 20 lbs. M. E. P., the condenser does half the work; at 30 lbs., one-third of the work; at 40 lbs., one-fourth, and so on. It is safe to assume that practically the condenser will save from one-fourth to one-third of the fuel, and it can be applied to any engine, cut-off or throttling, where a sufficient supply of water is available.

USEFUL RULES AND INFORMATION.

WATER.

Doubling the diameter of a pipe increases its capacity four times. Friction of liquids in pipes increases as the square of the velocity.

The mean pressure of the atmosphere is usually estimated at 14.7 lbs. per square inch, so that with a perfect vacuum it will sustain a column of mercury 29.9 inches or a column of water 33.9 feet high at sea level.

To find the pressure in pounds per square inch of a column of water, multiply the height of the column in feet by .434. Approximately, we say that every foot elevation is equal to ½ lb. pressure per square inch; this allows for ordinary friction.

To find the diameter of a pump cylinder to move a given quantity of water per minute (100 feet of piston being the standard of speed), divide the number of gallons by 4, then extract the square root, and the product will be the diameter in inches of the pump cylinder.

To find quantity of water elevated in one minute, running at 100 feet of piston speed per minute, square the diameter of the water cylinder in inches and multiply by 4. Example: Capacity of a 5-inch cylinder is desired. The square of the diameter (5 inches) is 25, which multiplied by 4, gives 100, the number of gallons per minute (approximately).

To find the horse power necessary to elevate water to a given height, multiply the weight of the water elevated per minute in pounds by the height in feet, and divide the product by 33,000 (an allowance should be added for water friction, and a further allowance for loss in steam cylinder, say from 20 to 30 per cent).

The area of the steam piston, multiplied by the steam pressure, gives the total amount of pressure that can be exerted. *The area of the water piston*, multiplied by the pressure of water per square inch, gives the resistance. *A margin* must be made between the *power* and the *resistance* to *move* the pistons at the required speed—say from 20 to 40 per cent., according to speed and other conditions.

To find the capacity of a cylinder in gallons. Multiplying the area in inches by the length of stroke in inches will give the total number of cubic inches; divide this amount by 231 (which is the cubical contents of a U. S. gallon in inches), and the product is the capacity in gallons.

WEIGHT AND CAPACITY OF DIFFERENT STANDARD GALLONS OF WATER.

	Cubic Inches in a Gallon.	Weight of a Gallon in pounds.	Gallons in a Cubic Foot.	Weight of a cubic foot of water, English standard, 62.321 lbs. Avordupois.
Imperial or English	277.274	10.00	6.232102	
United States	231.	8.33111	7.480519	

Weight of Crude Petroleum, 6½ lbs. per U. S. gallon, } 42 gallons to the barrel.
Weight of Refined " 6½ lbs. per U. S. gallon, }

A "miner's inch" of water is approximately equal to a supply of 12 U. S. gallons per minute.

FIRE STREAMS.

Pressures required at nozzle and at pump, with quantity and pressure of water necessary to throw water various distances through different sized nozzles—using 2½-inch rubber hose and smooth nozzles. G. A. Ellis, C. E.

Size of Nozzles.	1 Inch.				1⅛ Inch.				1¼ Inch.				1⅜ Inch.			
Pressure at nozzle	40	60	80	100	40	60	80	100	40	60	80	100	40	60	80	100
*Pressure at Pump or Hydrant with 100 ft. 2½ inch rubber hose.	48	73	97	121	54	81	108	135	61	92	123	154	71	107	144	180
Gallons per minute	155	189	219	245	196	240	277	310	242	297	342	383	293	358	413	462
Horizontal dist. thrown	109	142	168	186	113	148	175	193	118	156	186	207	124	166	200	224
Vertical dist. thrown	79	108	131	148	81	112	137	157	82	115	142	164	85	118	146	169

*For greater lengths of 2½-in. hose the increased friction can readily be obtained by noting the differences between the above given "pressure at nozzle" and "pressure at pump or hydrant with 100 *feet* of hose." For instance, if it requires at hydrant or pump 8 lbs. more pressure than it does at nozzle to overcome the friction when pumping through 100 feet of 2½-inch hose (using 1-inch nozzle, with 40 lb. pressure at said nozzle), then it requires 16 lbs. pressure to overcome the friction in forcing through 200 feet of same size hose.

USEFUL RULES AND INFORMATION.

EQUATION OF PIPES.

It is frequently desired to know what number of pipes of a given size are equal in carrying capacity to one pipe of a larger size. At the same velocity of flow the volume delivered by two pipes of different sizes is proportional to the squares of their diameters; thus, one 4-inch pipe will deliver the same volume as four 2-inch pipes. With the same head, however, the velocity is less in the smaller pipe, and the volume delivered varies about as the square root of the fifth power (*i. e.*, as the 2.5 power). The following table has been calculated on this basis. The figures opposite the intersection of any two sizes is the number of the smaller-sized pipes required to equal one of the larger. Thus, one 4-inch pipe is equal to 5.7 2-inch pipes.

Diameter Inches.	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	24
2	5.7	1														
3	15.6	2.8	1													
4	32	5.7	2.1	1												
5	55.9	9.9	3.6	1.7	1											
6	88.2	15.6	5.7	2.8	1.6	1										
7	130	22.9	8.3	4.1	2.3	1.5	1									
8	181	32	11.7	5.7	3.2	2.1	1.4	1								
9	243	43	15.6	7.6	4.3	2.8	1.9	1.3	1							
10	316	55.9	20.3	9.9	5.7	3.6	2.4	1.7	1.3	1						
11	401	70.9	25.7	12.5	7.2	4.6	3.1	2.2	1.7	1.3						
12	499	88.2	32	15.6	8.9	5.7	3.8	2.8	2.1	1.6	1					
13	609	108	39.1	19	10.9	7.1	4.7	3.4	2.5	1.9	1.2					
14	733	130	47	22.9	13.1	8.3	5.7	4.1	3.0	2.3	1.5	1				
15	787	154	55.9	27.2	15.6	9.9	6.7	4.8	3.6	2.8	1.7	1.2				
16	....	181	65.7	32	18.3	11.7	7.9	5.7	4.2	3.2	2.1	1.4	1			
17	....	211	76.4	37.2	21.3	13.5	9.2	6.6	4.9	3.8	2.4	1.6	1.2			
18	....	243	88.2	43	24.6	15.6	10.6	7.6	5.7	4.3	2.8	1.9	1.3	1		
19	....	278	101	49.1	28.1	17.8	12.1	8.7	6.5	5	3.2	2.1	1.5	1.1		
20	....	316	115	55.9	32	20.3	13.8	9.9	7.4	5.7	3.6	2.4	1.7	1.3	1	
22	....	401	146	70.9	40.6	25.7	17.5	12.5	9.3	7.2	4.6	3.1	2.2	1.7	1.3	
24	....	499	181	88.2	50.5	32	21.8	15.6	11.6	8.9	5.7	3.8	2.8	2.1	1.6	1
26	....	609	221	108	61.7	39.1	26.6	19	14.2	10.9	7.1	4.7	3.4	2.5	1.9	1.2
28	....	733	266	130	74.2	47	32	22.9	17.1	13.1	8.3	5.7	4.1	3	2.3	1.5
30	....	787	316	154	88.2	55.9	38	27.2	20.3	15.6	9.9	6.7	4.8	3.6	2.8	1.7
36	....	....	499	243	130	88.2	60	43	32	24.6	15.6	10.6	7.6	5.7	4.3	2.8
42	....	....	733	357	205	130	88.2	63.2	47	36.2	19	15.6	11.2	8.3	6.4	4.1
48	....	....	....	499	286	181	123	88.2	62.7	50.5	32	21.8	15.6	11.6	8.9	5.7
54	....	....	....	670	383	243	165	118	88.2	67.8	43	29.2	20.9	15.6	12	7.6
60	....	....	....	787	499	316	215	154	115	88.2	55.9	38	27.2	20.3	15.6	9.9

USEFUL RULES AND INFORMATION.

LOSS BY FRICTION OF WATER IN PIPES.

This table shows the loss in pounds pressure per square inch for each 100 feet in length due to friction, when discharging the given quantities of water per minute.

Gals. per minute.	SIZES OF PIPES—INSIDE DIAMETER.														
	¾-inch.	1-inch.	1¼-inch.	1½-inch.	2-inch.	2½-inch.	3-inch.	4-inch.	6-inch.	8-inch.	10-inch.	12-inch.	14-inch.	16-inch.	18-inch.
5	3.3	0.84	0.31	0.12	....	....	....	....	....	....	....	....	....	....	....
10	13.0	3.16	1.05	0.47	0.12	....	....	....	....	....	....	....	....	....	....
15	28.7	6.98	2.38	0.97	....	....	....	....	....	....	....	....	....	....	....
20	50.4	12.3	4.07	1.66	0.42	....	....	....	....	....	....	....	....	....	....
25	78.0	19.0	6.40	2.62	....	0.21	0.10	....	....	....	....	....	....	....	....
30	....	27.5	9.15	3.75	0.91	....	....	....	....	....	....	....	....	....	....
35	....	37.0	12.4	5.05	....	....	....	....	....	....	....	....	....	....	....
40	....	48.0	16.1	6.52	1.60	....	....	....	....	....	....	....	....	....	....
45	....	....	20.2	8.15	....	....	....	....	....	....	....	....	....	....	....
50	....	....	24.9	10.0	2.44	0.81	0.35	0.09	....	....	....	....	....	....	....
75	....	....	56.1	22.4	5.32	1.80	0.74	....	....	....	....	....	....	....	....
100	....	....	....	39.0	9.46	3.20	1.31	0.33	0.05	....	....	....	....	....	....
125	....	....	....	....	14.9	4.89	1.99	....	....	....	....	....	....	....	....
150	....	....	....	....	21.2	7.0	2.85	0.69	0.10	....	....	....	....	....	....
175	....	....	....	....	28.1	9.46	3.85	....	....	....	....	....	....	....	....
200	....	....	....	....	37.5	12.47	5.02	1.22	0.17	....	....	....	....	....	....
250	....	....	....	....	....	19.66	7.76	1.89	0.26	0.07	0.03	0.01	....	....	....
300	....	....	....	....	....	28.06	11.2	2.66	0.37	0.09	0.04	....	....	....	....
350	....	....	....	....	....	....	15.2	3.65	0.50	0.12	0.05	0.02	....	....	....
400	....	....	....	....	....	....	19.5	4.73	0.65	0.16	0.06	....	....	....	....
450	....	....	....	....	....	....	25.0	6.01	0.81	0.20	0.07	0.03	....	....	....
500	....	....	....	....	....	...	30.8	7.43	0.96	0.25	0.09	0.04	0.017	0.009	0.005
750	....	....	....	....	....	....	....	....	2.21	0.53	0.18	0.08	....	....	....
1000	....	....	....	....	....	....	....	....	3.88	0.94	0.32	0.13	0.062	0.036	0.020
1250	....	....	....	....	....	....	....	....	....	1.46	0.49	0.20	....	....	....
1500	....	....	....	....	....	....	....	....	....	2.09	0.70	0.29	0.135	0.071	0.040
1750	....	....	....	....	....	....	....	....	....	....	0.95	0.38	....	....	....
2000	....	....	....	....	....	....	....	....	....	....	1.23	0.49	0.234	0.123	0.071
2250	....	....	....	....	....	....	....	....	....	....	....	0.63	....	....	....
2500	....	....	....	....	....	....	....	....	....	....	....	0.77	0.362	0.188	0.107
3000	....	....	....	....	....	....	....	....	....	....	....	1.11	0.515	0.267	0.150
3500	....	....	....	....	....	....	....	....	....	....	....	....	0.697	0.365	0.204
4000	....	....	....	....	....	....	....	....	....	....	....	....	0.910	0.472	0.263
4500	....	....	....	....	....	....	....	....	....	....	....	....	....	0.593	0.333
5000	....	....	....	....	....	....	....	....	....	....	....	....	....	0.730	0.408

USEFUL RULES AND INFORMATION.

PRESSURE OF WATER.

The pressure of water in pounds per square inch for every foot in height to 300 feet; and then by intervals to 1,000 feet head. By this table, from the pounds pressure per square inch, the feet head is readily obtained, and *vice versa*.

Feet Head.	Pressure per Square Inch.	Feet Head.	Pressure per Square Inch.	Feet Head.	Pressure per Square Inch.	Feet Head	Pressure per Square Inch.	Feet Head.	Pressure per Square Inch.	Feet Head.	Pressure per Square Inch.
1	0.43	53	22.95	105	45.48	157	68.00	209	90.53	261	113.06
2	0.86	54	23.39	106	45.91	158	68.43	210	90.96	262	113.49
3	1.30	55	23.82	107	46.34	159	68.87	211	91.39	263	113.92
4	1.73	56	24.26	108	46.78	160	69.31	212	91.83	264	114.36
5	2.16	57	24.69	109	47.21	161	69.74	213	92.26	265	114.79
6	2.59	58	25.12	110	47.64	162	70.17	214	92.69	266	115.22
7	3.03	59	25.55	111	48.08	163	70.61	215	93.13	267	115.66
8	3.46	60	25.99	112	48.51	164	71.04	216	93.56	268	116.09
9	3.89	61	26.42	113	48.94	165	71.47	217	93.99	269	116.52
10	4.33	62	26.85	114	49.38	166	71.91	218	94.43	270	116.96
11	4.76	63	27.29	115	49.81	167	72.34	219	94.86	271	117.39
12	5.20	64	27.72	116	50.24	168	72.77	220	95.30	272	117.82
13	5.63	65	28.15	117	50.68	169	73.20	221	95.73	273	118.26
14	6.06	66	28.58	118	51.11	170	73.64	222	96.16	274	118.69
15	6.49	67	29.02	119	51.54	171	74.07	223	96.60	275	119.12
16	6.93	68	29.45	120	51.98	172	74.50	224	97.03	276	119.56
17	7.36	69	29.88	121	52.41	173	74.94	225	97.46	277	119.99
18	7.79	70	30.32	122	52.84	174	75.37	226	97.90	278	120.42
19	8.22	71	30.75	123	53.28	175	75.80	227	98.33	279	120.85
20	8.66	72	31.18	124	53.71	176	76.23	228	98.76	280	121.29
21	9.09	73	31.62	125	54.15	177	76.67	229	99.20	281	121.72
22	9.53	74	32.05	126	54.58	178	77.10	230	99.63	282	122.15
23	9.96	75	32.48	127	55.01	179	77.53	231	100.06	283	122.59
24	10.39	76	32.92	128	55.44	180	77.97	232	100.49	284	123.02
25	10.82	77	33.35	129	55.88	181	78.40	233	100.93	285	123.45
26	11.26	78	33.78	130	56.31	182	78.84	234	101.36	286	123.89
27	11.69	79	34.21	131	56.74	183	79.27	235	101.79	287	124.32
28	12.12	80	34.65	132	57.18	184	79.70	236	102.23	288	124.75
29	12.55	81	35.08	133	57.61	185	80.14	237	102.60	289	125.18
30	12.99	82	35.52	134	58.04	186	80.57	238	103.09	290	125.62
31	13.42	83	35.95	135	58.48	187	81.00	239	103.53	291	126.05
32	13.86	84	36.39	136	58.91	188	81.43	240	103.96	292	126.48
33	14.29	85	36.82	137	59.34	189	81.87	241	104.39	293	126.92
34	14.72	86	37.25	138	59.77	190	82.30	242	104.83	294	127.35
35	15.16	87	37.68	139	60.21	191	82.73	243	105.26	295	127.78
36	15.59	88	38.12	140	60.64	192	83.17	244	105.69	296	128.22
37	16.02	89	38.55	141	61.07	193	83.60	245	106.13	297	128.65
38	16.45	90	38.98	142	61.51	194	84.03	246	106.56	298	129.08
39	16.89	91	39.42	143	61.94	195	84.47	247	106.99	299	129.51
40	17.32	92	39.85	144	62.37	196	84.90	248	107.43	300	129.95
41	17.75	93	40.28	145	62.81	197	85.33	249	107.86	320	138.62
42	18.19	94	40.72	146	63.24	198	85.76	250	108.29	330	142.95
43	18.62	95	41.15	147	63.67	199	86.20	251	108.73	350	151.61
44	19.05	96	41.58	148	64.10	200	86.63	252	109.16	370	160.27
45	19.49	97	42.01	149	64.54	201	87.07	253	109.59	390	168.94
46	19.92	98	42.45	150	64.97	202	87.50	254	110.03	400	173.27
47	20.35	99	42.88	151	65.40	203	87.93	255	110.46	500	216.58
48	20.79	100	43.31	152	65.84	204	88.36	256	110.89	600	259.90
49	21.22	101	43.75	153	66.27	205	88.80	257	111.32	700	303.22
50	21.65	102	44.18	154	66.70	206	89.23	258	111.76	800	346.54
51	22.09	103	44.61	155	67.14	207	89.66	259	112.19	900	389.86
52	22.52	104	45.05	156	67.57	208	90.10	260	112.62	1000	433.18

USEFUL RULES AND INFORMATION.

GALLONS DISCHARGED PER HOUR THROUGH VARIOUS SIZED ORIFICES UNDER STATED PRESSURES.

Head in Feet.	Pounds pressure per square inch.	DIAMETERS OF ORIFICES IN INCHES AND FRACTIONS OF AN INCH.									
		¼ Inch.	⅜ Inch.	½ Inch.	⅝ Inch.	¾ Inch.	1 Inch.	1¼ Inch.	1½ Inch.	1¾ Inch.	2 Inch.
20	8.66	300	720	1260	1920	2760	4920	7380	11100	15120	19740
40	17.32	450	960	1800	2760	3960	6720	10920	15720	21360	27960
60	25.99	540	1200	2160	3480	4800	8580	13380	19200	26220	34260
80	34.65	620	1380	2460	3840	5580	9840	15480	22260	30300	39540
100	43.31	690	1560	2760	4320	6240	11040	17280	24900	33900	44280
120	51.98	780	1680	3000	4740	6840	12120	18960	27240	37440	48480
140	60.64	816	1860	3300	5100	7320	13020	20160	29460	39080	52320
150	64.97	840	1920	3420	5280	7620	13560	21180	30480	41460	54120
175	75.80	900	2040	3660	5700	8220	14640	22800	32880	44940	58560
200	86.63	960	2220	3900	6120	8760	15600	25020	35880	47880	62580
235	101.79	1080	2460	4320	8280	11160	17100	26760	38520	52260	68460

The pressure or head of water is taken at the orifice, no allowance being made for friction in the pipe. In practical calculations to determine the height which water can be thrown, the head consumed by the friction of the water in flowing from the source to the orifice must be considered.

AREA OF CIRCLES.

Diam.	Area.	Diam.	Area.	Diam.	Area.	Diam.	Area.	Diam.	Area.
⅛	0.0123	7½	44.178	22½	397.60	50	1963.5	80	5026.5
¼	0.0491	8	50.265	23	415.47	51	2042.8	81	5153.0
⅜	0.1104	8½	56.745	23½	433.73	52	2123.7	82	5281.0
½	0.1963	9	63.617	24	452.39	53	2206.1	83	5410.6
⅝	0.3067	9½	70.882	24½	471.43	54	2290.2	84	5541.7
¾	0.4417	10	78.54	25	490.87	55	2375.8	85	5674.5
⅞	0.6013	10½	86.59	26	530.93	56	2463.0	86	5808.8
1	0.7854	11	95.03	27	572.55	57	2551.7	87	5944.6
1⅛	0.9940	11½	103.86	28	615.75	58	2642.0	88	6082.1
1¼	1.227	12	113.09	29	660.52	59	2733.9	89	6221.1
1⅜	1.484	12½	122.71	30	706.86	60	2827.4	90	6361.7
1½	1.767	13	132.73	31	754.76	61	2922.4	91	6503.8
1⅝	2.073	13½	143.13	32	804.24	62	3019.0	92	6647.6
1¾	2.405	14	153.93	33	855.30	63	3117.2	93	6792.9
1⅞	2.761	14½	165.13	34	907.92	64	3216.9	94	6939.7
2	3.141	15	176.71	35	962.11	65	3318.3	95	7088.2
2¼	3.976	15½	188.69	36	1017.8	66	3421.2	96	7238.2
2½	4.908	16	201.06	37	1075.2	67	3525.6	97	7389.8
2¾	5.939	16½	213.82	38	1134.1	68	3631.6	98	7542.9
3	7.068	17	226.98	39	1194.5	69	3739.2	99	7697.7
3¼	8.295	17½	240.52	40	1256.6	70	3848.4	100	7854.0
3½	9.621	18	254.46	41	1320.2	71	3959.2	101	8011.9
3¾	11.044	18½	268.80	42	1385.4	72	4071.5	102	8171.3
4	12.566	19	283.52	43	1452.2	73	4185.3	103	8332.3
4½	15.904	19½	298.64	44	1520.5	74	4300.8	104	8494.9
5	19.635	20	314.16	45	1590.4	75	4417.8	105	8659.1
5½	23.758	20½	330.06	46	1661.9	76	4536.4	106	8824.8
6	28.274	21	346.36	47	1734.9	77	4656.0	107	8992.0
6½	33.183	21½	363.05	48	1809.5	78	4778.3	108	9160.9
7	38.484	22	380.13	49	1885.7	79	4901.6	109	9331.3

USEFUL RULES AND INFORMATION.

CAPACITY OF ROUND TANKS AND CYLINDERS IN CUBIC FEET AND IN U. S. GALLONS

(FROM TRAUTWEIN.)

Of 231 cubic inches (or 7.4805 gallons to a cubic foot); and for one foot of length of the cylinder. For the contents for a greater diameter than any in the table take the quantity opposite one-*half* said diameter, and multiply it by 4. Thus, the number of cubic feet in one foot length of a pipe 80 inches in diameter is equal to 8.728×4=34.912 cubic feet. So also with gallons and areas.

Diameter in inches.	Diameter in decimals of a foot.	For 1 foot in length.		Diameter in inches.	Diameter in decimals of a foot.	For 1 foot in length.		Diameter in inches.	Diameter in decimals of a foot.	For 1 foot in length.	
		Cubic ft., also area in sq. ft.	Gallons of 231 cubic ins.			Cubic ft., also area in sq. ft.	Gallons of 231 cubic ins.			Cubic ft., also area in sq. ft.	Gallons of 231 cubic ins.
1/16	.0208	.0003	.0026	6 3/8	.5625	.2485	1.859	19	1.583	1.969	14.73
1 1/16	.0260	.0005	.0040	7	.5833	.2673	1.999	19 1/2	1.625	2.074	15.52
1/8	.0313	.0008	.0057	7 1/8	.6042	.2868	2.144	20	1.666	2.182	16.32
1 1/16	.0365	.0010	.0078	7 1/4	.6250	.3068	2.295	20 1/2	1.708	2.292	17.15
1/4	.0417	.0014	.0102	7 3/8	.6458	.3275	2.450	21	1.750	2.405	17.99
1 3/16	.0469	.0017	.0129	8	.6667	.3490	2.611	21 1/2	1.792	2.521	18.86
5/16	.0521	.0021	.0159	8 1/8	.6875	.3713	2.777	22	1.833	2.640	19.75
1 1/16	.0573	.0026	.0193	8 1/4	.7083	.3940	2.948	22 1/2	1.875	2.761	20.65
3/8	.0625	.0031	.0230	8 3/8	.7292	.4175	3.125	23	1.917	2.885	22.58
1 3/16	.0677	.0036	.0270	9	.7500	.4418	3.305	23 1/2	1.958	3.012	21.53
7/16	.0729	.0042	.0312	9 1/8	.7708	.4668	3.492	24	2.000	3.143	23.50
1 5/16	.0781	.0048	.0359	9 1/4	.7917	.4923	3.682	25	2.083	3.409	25.50
1	.0833	.0055	.0408	9 3/8	.8125	.5185	3.879	26	2.166	3.687	27.58
1 1/16	.1042	.0085	.0638	10	.8333	.5455	4.081	27	2.250	3.976	29.74
1 1/8	.1250	.0123	.0918	10 1/8	.8542	.5730	4.286	28	2.333	4.276	31.99
1 3/16	.1458	.0168	.1250	10 1/4	.8750	.6013	4.498	29	2.416	4.587	34.31
2	.1667	.0218	.1632	10 3/8	.8958	.6303	4.714	30	2.500	4.909	36.72
2 1/16	.1875	.0276	.2066	11	.9167	.6600	4.937	31	2.583	5.241	39.21
2 1/8	.2083	.0341	.2550	11 1/8	.9375	.6903	5.163	32	2.666	5.585	41.78
2 3/16	.2292	.0413	.3085	11 1/4	.9583	.7213	5.395	33	2.750	5.940	44.43
3	.2500	.0491	.3673	11 3/8	.9792	.7530	5.633	34	2.833	6.305	47.17
3 1/16	.2708	.0576	.4310	12	1 foot	.7854	5.876	35	2.916	6.681	49.98
3 1/8	.2917	.0668	.4998	12 1/8	1.042	.8523	6.375	36	3.000	7.069	52.88
3 3/16	.3125	.0767	.5738	13	1.083	.9218	6.895	37	3.083	7.468	55.86
4	.3333	.0873	.6528	13 1/8	1.125	.9940	7.435	38	3.166	7.876	58.92
4 1/16	.3542	.0985	.7370	14	1.167	1.069	7.997	39	3.250	8.296	62.06
4 1/8	.3750	.1105	.8263	14 1/8	1.208	1.147	8.578	40	3.333	8.728	65.29
4 3/16	.3958	.1231	.9205	15	1.250	1.227	9.180	41	3.416	9.168	68.58
5	.4167	.1364	1.020	15 1/8	1.292	1.310	9.801	42	3.500	9.620	71.96
5 1/16	.4375	.1503	1.124	16	1.333	1.396	10.44	43	3.583	10.084	75.43
5 1/8	.4583	.1650	1.234	16 1/8	1.375	1.485	11.11	44	3.666	10.560	79.00
5 3/16	.4792	.1803	1.349	17	1.417	1.576	11.79	45	3.750	11.044	82.62
6	.5000	.1963	1.469	17 1/8	1.458	1.670	12.50	46	3.833	11.540	86.32
6 1/16	.5208	.2130	1.594	18	1.500	1.767	13.22	47	3.916	12.048	90.12
6 1/8	.5417	.2305	1.724	18 1/8	1.542	1.867	13.97	48	4.000	12.566	94.02

USEFUL RULES AND INFORMATION.

FRICTION IN PIPES AND SEWERS.

(HASWELL'S HANDBOOK, HARPER & BROS.)

Friction in flow of water through pipes, etc., of a uniform diameter, is independent of pressure and increases directly as length, very nearly as square of velocity of flow and inversely as diameter of pipe.

DISCHARGE OF WATER IN PIPES.

FOR ANY LENGTH AND HEAD, AND FOR DIAMETERS FROM 1 INCH TO 10 FEET. IN CUBIC FEET PER MINUTE. (BEARDMORE.)

Diameter.	Tab. No.	Diameter.	Tab. No.	Diameter.	Tab. No.	Diameter.	Tab. No.	Diameter.	Tab. No.
Inches.		Ft. Ins.		Ft. Ins.		Ft. Ins.		Ft. Ins.	
1.	4.71	9	1147.6	1 11	11983	3 1	39329	4 9	115854
1.25	8.48	10	1493.5	2	13328	3 2	42040	5	131703
1.5	13.02	11	1894.9	2 1	14758	3 3	44863	5 3	148791
1.75	19.15	1	2356.	2 2	16278	3 4	47794	5 6	167139
2.	26.69	1 1	2876.7	2 3	17889	3 5	50835	5 9	186786
2.5	46.67	1 2	3463.3	2 4	19592	3 6	53995	6	207754
3.	73.5	1 3	4115.9	2 5	21390	3 7	57265	6 6	253781
3.5	108.14	1 4	4836.9	2 6	23282	3 8	60648	7	305437
4.	151.02	1 5	5628.5	2 7	25270	3 9	64156	7 6	362935
4.5	194.84	1 6	6493.1	2 8	27358	3 10	67782	8	426481
5.	263.87	1 7	7433.	2 9	29547	3 11	71526	8 6	496275
6.	416.54	1 8	8449.	2 10	31834	4	75392	9	572508
7.	612.32	1 9	9544.	2 11	34228	4 3	87730	9 6	655369
8.	854.99	1 10	10722.	3	36725	4 6	101207	10	745038

This table is applicable to Sewers and Drains by taking same proportion of tabular numbers that area of cross-section of water in sewer or drain bears to whole area of sewer or drain.

TO COMPUTE VOLUME DISCHARGED.

When Length of Pipe, Height or Fall, and Diameter are given. RULE: Divide tabular number, opposite to diameter of tube, by square root of rate of inclination, and quotient will give volume required in cubic feet per minute.

EXAMPLE. A pipe has a diameter of 9 inches, and a length of 4750 feet; what is its discharge per minute under a head of 17.5 feet?

$$\text{Tab. No. 9 in.} = 1147.6, \text{ and } \frac{1147.61}{\sqrt{\frac{4750}{17.5}}} = \frac{1147.61}{16.47} = 69.67 \text{ cubic feet.}$$

TO COMPUTE DIAMETER.

When Length, Head and Volume are given. RULE: Multiply discharge per minute by square root of ratio of inclination; take nearest corresponding number in table, and opposite to it is diameter required.

EXAMPLE. Take elements of preceding case.

$69.67 \times \sqrt{\frac{4750}{17.5}} = 1147.61$, and opposite to this is 9 inches. Or, $\sqrt[5]{\frac{v\ l}{1542\ h}} = d$ in feet; v representing velocity in feet per second, and l length in feet.

TO COMPUTE HEAD.

When Length, Discharge and Diameter are given. RULE: Divide tabular number for diameter by discharge per minute, square quotient, and divide length of pipe by it; quotient will give head necessary to force given volume of water through pipe in one minute.

EXAMPLE. Take elements of preceding cases.

$$\frac{1147.61}{69.67} = 16.47;\ 16.47^2 = 271.3;\ 4750 \div 271.2 = 17.5 \text{ feet.}$$

TO COMPUTE VELOCITY.

When Volume and Diameter alone are given. RULE: Divide volume when in feet per minute by area in feet, and quotient, divided by 60, will give velocity in feet per second.

EXAMPLE. Take elements of preceding case.

$$\frac{69.67}{.75^2 \times .7854} \div 60 = 2.63 \text{ feet.}$$

When Volume is not given. RULE: Multiply square root of product of height of pipe by diameter in feet, divided by length in feet, by 50, and product will give velocity in feet per second. (Beardmore.)

USEFUL RULES AND INFORMATION.

DISCHARGE OF WATER IN PIPES—CONCLUDED.

TO COMPUTE INCLINATION OF PIPE.

When Volume, Diameter and Length are given. $\left\{\frac{V}{2356}\right\}^2 \frac{1}{d^5} = \frac{h}{l}$.

ILLUSTRATION. Take elements of preceding case.

$$\left\{\frac{69.67}{2356}\right\}^2 \times \frac{1}{.75^5} = .000874 \times 4.214 = .00368, \text{ and } \frac{17.5}{4750} = .00368, \text{ or } 4750 \times .00368 = 17.49 \text{ feet head.}$$

MENSURATION.

Area of Triangle = Base × ½ Altitude.
Circumference of Circle = Diameter × 3.1416.
Diameter of Circle = Circumference × .3183.
Area of Circle = Square of Radius × 3.1416.
Surface of Cylinder or Prism = Area of both ends + Length × Circumference.
Contents of Cylinder or Prism = Area of End × Length.
Surface of Sphere = Diameter² × 3.1416.
Contents of Sphere = Diameter³ × .5236.

WROUGHT IRON PIPE.—APPROXIMATE NUMBER OF FEET IN MINIMUM CAR LOAD (30,000 Lbs.).

SIZE . . . . . INCHES	⅛	¼	⅜	½	¾	1	1¼	1½	2	2½	3
NUMBER OF FEET	125000	71430	53575	35715	26785	17965	13390	11195	8310	5230	3980
SIZE . . . . . INCHES	3½	4	4½	5	6	7	8	9	10	12	14
NUMBER OF FEET	3335	2815	2400	2070	1600	1290	1065	890	750	615	520

SEWER PIPE.—APPROXIMATE NUMBER OF FEET IN MINIMUM CAR LOAD (30,000 Lbs.).

SIZE . . . . . INCHES	3	4	5	6	8	9	10	12	15	18	20	24
NUMBER OF FEET . . .	4285	3000	2300	1765	1250	1035	885	715	525	405	340	240

APPROXIMATE NUMBER OF CUBIC FEET OF AIR ONE SQUARE FOOT OF RADIATION WILL HEAT.—(NASON.)

One Square Foot of Radiating Surface will heat with	In Dwellings, School Rooms, Offices, Etc.	In Halls, Stores, Lofts, Factories, Etc.	In Churches, Large Auditoriums, Etc.
DIRECT STEAM RADIATION	60 to 80 cubic feet.	75 to 100 cubic feet.	150 to 200 cubic feet.
INDIRECT STEAM RADIATION	40 to 50 " "	50 to 70 " "	100 to 140 " "
HIGH TEMP. DIRECT HOT WATER RADIATION . . .	50 to 70 " "	65 to 90 " "	130 to 180 " "
LOW TEMP. DIRECT HOT WATER RADIATION . . .	30 to 50 " "	35 to 65 " "	70 to 130 " "
HIGH TEMP. INDIRECT HOT WATER RADIATION . .	30 to 60 " "	35 to 75 " "	70 to 150 " "
LOW TEMP. INDIRECT HOT WATER RADIATION . .	20 to 40 " "	25 to 50 " "	50 to 100 " "

The above proportions will give a temperature in the buildings described of 70° Fahr., the thermometer being at zero in outside atmosphere.

While there is no iron rule for computing the proper amount of radiation for heating buildings owing to the variable conditions that enter into the calculation, the above table will prove valuable if allowances are made for extreme cases.

It is well to remember that small rooms, rooms with large window surfaces or exposed sides, and rooms with exceptionally thick walls or fire-proof tiling require more radiating surface in proportion to space than is ordinarily needed. Frame buildings require more radiation than stone, and stone more than brick.

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